N. SANJAY REBELLO

Department of Physics, 116 Cardwell Hall, Kansas State University
Email: srebello@ksu.edu Phone: (785) 537-7543

CURRICULUM VITAE

EDUCATION

1995 Ph. D. (Physics) Brown University, Providence, RI, USA
Dissertation: *Modeling and Experiments on Tunneling in Floating-Gate Memory Cells with Applications in Electronic Artificial Analog Neutral Networks*
Advisors: Dr. Fred S. Shoucair (Electrical Engineering), Dr. Hendrik J. Gerritsen (Physics)
1992 Sc.M. (Physics), Sc.M. (Electrical Engineering), Brown University, Providence, RI, USA
1989 M.Sc. (Physics), B.E. (Electrical & Electronics Engineering) Birla Institute of Technology & Science, Pilani, India

EMPLOYMENT

2013 – Professor, Department of Physics, Kansas State University
2002 – Adjunct Graduate Faculty, Dept. of Curriculum & Instruction, Kansas State University
2005 – 2013 Associate Professor, Department of Physics, Kansas State University
2001 – 2005 Assistant Professor, Department of Physics, Kansas State University
1998 – 2001 Assistant Professor, Department of Physics, Clarion University of Pennsylvania
1995 – 1998 Postdoctoral Research Associate, Department of Physics, Kansas State University
1993 – 1994 Fellow, Center for the Advancement of College Teaching, Brown University
1989 – 1995 Teaching Assistant, Department of Physics, Brown University

RECOGNITIONS

Ernest K. and Lillian E. Chapin Chair, Department of Physics, Kansas State University, 2014

Outstanding Faculty Honoree of Mortar Board Senior Honor Society, Kansas State University, 2013 Mortar Board recognizes one faculty member from each college every year "based on their dedication to student success and their contributions to the university."

Coffman Chair for University Distinguished Teaching Scholars, Kansas State University, 2012 – 2013. The KSU website http://www.k-state.edu/provost/resources/teaching/scholars/ states "A faculty member acknowledged as a leading teaching scholar is appointed to the chair for one academic year. All who are selected to hold the chair retain the title of University Distinguished Teaching Scholar throughout their careers."

AAPT Distinguished Service Citation, presented by the American Association of Physics Teachers, August 2010.

Women in Engineering & Science Program Making a Difference Award, presented by Kansas State University, 2006 and 2009.

Presidential Early Career Award for Scientists and Engineers (PECASE), 2004. Award given to a total of 57 science professionals in 2004. The White House Office of Science & Technology Policy press release describes the award as the "nation's highest honor for professionals at the outset of their careers."

Schwenk Teaching Award, presented by Kansas State University Physics majors in recognition of teaching in undergraduate physics courses, 2004-2005 and 2011-2012.

Boeing Autometric Award for Best Paper in Image Analysis and Interpretation, presented by American Society for Photogrammetry and Remote Sensing for the paper titled "Supervised and Unsupervised Spectral Angle Classifiers," by Youngsinn Sohn and N. Sanjay Rebello, 2003.

Honorable Mention, *Ninth Annual Computers in Physics Educational Software Contest* for the computer program titled "Energy Diagram Explorer," by N. Sanjay Rebello, Chandima Cumaranatunge, and Dean A. Zollman, January 1999.

Winner, *Eighth Annual Computers in Physics Educational Software Contest*, for the computer program titled "Energy Band Creator," by N. Sanjay Rebello, Chandima Cumaranatunge, Lawrence T. Escalada and Dean A. Zollman, January 1998.

Honorable Mention, *Eighth Annual Computers in Physics Educational Software Contest*, for the computer program titled "Scanning Tunneling Microscope (STM) Simulator," by N. Sanjay Rebello, Konstantin Sushenko, and Dean A. Zollman, January 1998.

Honorable Mention, *Eighth Annual Computers in Physics Educational Software Contest*, for the computer program titled "Wave Function Suite," by N. Sanjay Rebello, Chandima Cumaranatunge, Gary Dong, and Dean A. Zollman, January 1998.

Winner, *Seventh Annual Computers in Physics Educational Software Contest*, for the computer program titled "Spectroscopy," by N. Sanjay Rebello, Chandima Cumaranatunge, Lawrence T. Escalada and Dean A. Zollman, January 1997.

Honorable Mention, *Seventh Annual Computers in Physics Educational Software Contest*, "Semiconductor Device Simulator," by N. Sanjay Rebello, Chandra M. Ravipati and Dean A. Zollman, January 1997.

Presidential Award for Excellence in Teaching, with $2000 honorarium, Brown University, May 1992.

TEACHING

Kansas State University **Fall 2001 –**

Concepts of Physics (PHYS106): 3 hours Lecture + 2 hours Activities Center, ~170 students, Elementary Education majors; Content: Broad overview of various topics in physics and physical science that would be of value to future elementary teachers with some discussion of the underlying pedagogy, Text: *Activities Center Lab Manual*, Fall 2005, 2006, 2009, 2011 – 2014.

Physical World – I (PHYS101): 3 hours Lecture, ~150 students, Non-science majors, Content: Overview of conceptual physics; Text: *Conceptual Physics* by Hewitt; Fall 2001, 2002, Spring 2014.

Engineering Physics – II (PHYS214): 2 hours Lecture, ~220 students, Engineering & Physics majors, Content: Calculus-based physics- electricity, magnetism & optics; Text: *Physics for Scientists and Engineers* by Tipler & Mosca; Fall 2010.

Physics Today I & II (PHYS122 & 123): 2 hour Recitation, 20 students, Physics majors, Content: Intro to research in the KSU Physics Dept, Novel approaches to problem solving; *Text*: None; Fall 2008, 2009, 2011, 2012, 2014; Spring 2011 – 2013.

Teaching University Physics (PHYS620): 3 hours discussion, 7 students, Physics majors (seniors) & graduate students, Content: main issues in physics education, instructional strategies, assessment, introduction to physics education research; Text: No formal text. *Teaching Physics with the Physics Suite* by Edward F. Redish, Wiley; Fall 2004, 2006, 2008, 2010.

Physics of Solids (PHYS655): 3 hours Lecture, ~6 students, Physics majors (seniors) & beginning graduate students; Content: Crystal structure, phonons, electrons, Text: *Introduction to Solid State Physics* by C. Kittel, Fall 2003, 2005, 2007.

Physical Measurement & Instrumentation (PHYS636): 8 hours Lab, 4-12 students, Physics majors (seniors) & minors, Content: Analog & digital electronics; Text: *Art of Electronics* by Horowitz & Hill; Spring 2002 – 2009.

Journal Club (PHYS806): 1 hour Seminar, ~6 students, graduate students, seminar on learning communication and teaching skills, Fall 2007.

Physics Education Seminar (PHYS807): 1 hour Seminar, ~6 students, Graduate and undergraduate students interested in physics education research, Several times from Fall 2002 – 2014.

General Physics – I (PHYS113): 1 hour Recitation, ~40 students, Life-science majors, Content: Algebra-based physics- mechanics and thermodynamics; Text: *Physics* by Giancoli; Fall 2003.

Engineering Physics – II (PHYS214): 4 hours Studio, ~40 students, Engineering & Physics majors, Content: Calculus-based physics- electricity, magnetism & optics; Text: *Physics* by Halliday & Resnick; Fall 2002.

Clarion University of Pennsylvania **Fall 1998 – Summer 2001**

Basic Physical Science: Physics & Astronomy: 3 hours Lecture, 32 students, Elementary education majors, Content: Overview selected topics in conceptual physics & astronomy; Text: None—used own notes

General Physics – I: 6 hours Studio, ~40 students, Life-science majors, Content: Algebra-based physics- mechanics and thermodynamics; Text: *Physics* by Giancoli.

General Physics – II: 6 hours Studio, ~40 students, Life-science majors, Content: Algebra-based physics- electricity, magnetism, circuits, optics; Text: *Physics* by Giancoli.

Analog Electronics: 2 hours Lecture + 3 hours Lab, ~6 students, Engineering & Physics majors, Content: R-C Circuits, diodes, transistors; Text: *Electronic Meas. & Instru.* by Deifenderfer & Holton & own notes.

Digital Electronics: 2 hours Lecture + 3 hours Lab, ~6 students, Engineering & Physics majors, Content: Gates, combinatorial logic circuits, flip-flops, sequential logic circuits, *Digital Fundamentals* by Floyd & own notes.

Optics: 3 hours Lecture, ~6 students, Physics majors (seniors); Content: geometrical optics, physical optics, Text: *Optics* by Hoecht.

Solid State Physics: Individualized Instruction, 2 students, Physics majors (seniors); Content: Crystal structure, phonons, electrons, Text: *Solid State Physics* by Hook & Hall, Summer 2001.

Kansas State University **Fall 1995 – Summer 1998**

General Physics – II (PHYS113): 1 hour Recitation, ~40 students, Life-science majors, Content: Algebra-based physics- electricity, magnetism, optics; Text: *Physics* by Giancoli.

Engineering Physics – I (PHYS213): 2 hours Recitation, ~40 students, Engineering & Physics majors, Content: Calculus-based physics- kinematics, mechanics, thermodynamics; Text: *Physics* by Halliday & Resnick.

Engineering Physics – II (PHYS214): 2 hours Recitation, ~40 students, Engineering & Physics majors, Content: Calculus-based physics- electricity, magnetism & optics; Text: *Physics* by Halliday & Resnick.

Contemporary Physics (PHYS452): 3 hours Lecture + 2 hours Lab, ~20 students, Secondary Education majors for certification in Physics, Content: Miscellaneous topics in 20$^{th\ t}$ Century physics; Text: Followed materials developed as part of Visual Quantum Mechanics project.

RESEARCH & SCHOLARSHIP

Grant Awards

1. "Science Inquiry Using Physical and Virtual Experiments: Systematic Investigation of Issues and Conditions for Learning," Sadhana Puntambekar (P.I. – University of Wisconsin, Madison), N. Hari Narayanan (P.I. – Auburn University), N. Sanjay Rebello (P.I. – Kansas State University), National Science Foundation, $177,828 (KSU share of the budget), 2014 – 2018.
2. "Foundational Research on Problem Mathematization in Undergraduate Physics," Eleanor Syare (P.I.), Dean A. Zollman and N. Sanjay Rebello (Co-P.I.s), National Science Foundation, $497,404; 2014-2017.

3. "Research on the Use of Visual Cueing and Feedback to Facilitate Problem Solving," N. Sanjay Rebello (P.I.), Andrew M. Bennett and Lester C. Loschky (Co-P.I.s), National Science Foundation, $1,233,906; 2014 – 2017.
4. "Advancing Grades 6-12 Science Achievement: SHIFTS in Next Generation Science Teacher Professional Development," Kimberly Staples (P.I.) N. Sanjay Rebello (Co-P.I.) and Jacqueline D. Spears (Kansas Department of Education; $260,050; 2013 – 2014.
5. "TUES: Infusing Pedagogical Content Knowledge into a Physics Course for Future Elementary Teachers," N. Sanjay Rebello (P.I.), Kimberly Staples and Dean Zollman (Co-P.I.s), National Science Foundation, $199,993, 2012 – 2015.
6. "FIRE: Exploring Visual Cueing to Facilitate Problem Solving in Physics," N. Sanjay Rebello (P.I.) and Lester C. Loschky (Co-P.I.), National Science Foundation, $399,985 2011 – 2014.
7. "Tracking Eyes Across the Prairies: Applying Eye-Tracking Methodology to Physics Education Research Problems," Jose P. Mestre (University of Illinois – P.I.), Elizabeth Gire (University of Memphis), Jennifer Docktor (University of Wisconsin - LaCrosse), N. Sanjay Rebello (Co-P.I.s) Scholar-in-Residence Grant awarded by the Physics Education Research Leadership Organizing Committee, $2,500, 2010 – 2012.
8. "Enhancing Literacy in Science through Digital Text, Simulations, and Design Challenges," Sadhana Puntambekar (P.I. – University of Wisconsin, Madison), N. Hari Narayanan (Auburn University), Roland Hubscher (Bentley University), N. Sanjay Rebello (P.I. – Kansas State University), Gates Foundation: Next Generation of Learning Challenges, $14,810 (KSU share of the budget), 2011 – 2012.
9. "K-State TEACH Program (Robert Noyce Scholarship)," Christopher T. Culbertson (P.I.), Matthew Brueseke, Carolyn Ferguson, Lawrence C. Scharmann, and N. Sanjay Rebello (Co-P.I.s), National Science Foundation, $875,359, 2009 – 2014.
10. "GK-12: Evidence-based Inquiry into the Distant, Remote, or Past (EIDRoP): Linking Evidence to Inference in the Kansas Science Classroom," Carolyn J. Ferguson, (P.I.), Eric Maata, Timothy Bolton, Scott Tanona, and N. Sanjay Rebello (Co-P.I.s), National Science Foundation, $2,768,351, 2009 – 2014.
11. "Investigating Trajectories of Learning & Transfer of Problem Solving Expertise from Mathematics to Physics to Engineering," N. Sanjay Rebello (P.I.), Andrew Bennett, Steve Warren and Dean Zollman (Co-P.I.s), REESE Grant, National Science Foundation, $999,995, 2008 – 2012.
12. "Scaffolding Student Use of Multiple Representations for Science Learning," Sadhana Puntambekar (P.I. – University of Wisconsin, Madison), N. Hari Narayanan (Auburn University), Roland Hubscher (Bentley University), N. Sanjay Rebello (P.I. – Kansas State University), Institute of Educational Sciences, U.S. Department of Education, $200,137 (KSU share of the budget), 2008 – 2012.
13. "Integrating Experimentation and Instrumentation in Upper-Division Physics," N. Sanjay Rebello (P.I.), Brian Washburn and Kristan Corwin (Co-P.I.), Course Curriculum & Lab Innovation (CCLI) Grant, National Science Foundation, $149,663, 2008 – 2012.
14. "Collaborative Research: Facilitating Case Reuse during Problem Solving," David Jonassen (P.I. – University of Missouri, Columbia), N. Sanjay Rebello (P.I. – Kansas State University), National Science Foundation, $112,582 (KSU share of the budget), 2006 –2010.
15. "Collaborative Research: Coupling Conversational Interactivity with Multimedia in Support of Physics Learning," Dean A. Zollman (P.I. – Kansas State University), N. Sanjay Rebello (Co-P.I.), Scott Stevens (P.I. – Carnegie Mellon University) and Michael Christel (Co-P.I. – Carnegie Mellon University), National Science Foundation, $329,238, 2007 –2011.

16. "HP Technology for Teaching Leadership Award," N. Sanjay Rebello (P.D.), David Van Domelen (Co-P.I.), Hewlett-Packard Corporation, $120,500 (equipment, stipend, travel and services), 2006 – 2008.
17. "Implementation of the Interactive Studio Concept to an Upper Level Physics Course: Studio Optics," Christopher Sorensen (P.I.), Brett DePaola, Bruce Law, N. Sanjay Rebello and Zenghu Chang (Co-P.I.s), Course Curriculum & Lab Innovation (CCLI) Grant National Science Foundation, $98,995, 2005 – 2008.
18. "CoMPASS: Integrating Digital Text in Design-based Science Classroom," Sadhana Puntambekar (P.I. – Univ. of Wisconsin, Madison), Roland Hubscher (Bentley University), Ann O'Connell (University of Connecticut) N. Sanjay Rebello (Co-P.I.), Collaborative Grant, National Science Foundation, $82,343 (KSU share of the budget), 2004 – 2010.
19. "Curriculum Resources for Physics Instruction Using Interactive Technologies and Digital Formats," N. Sanjay Rebello (P.D.) Kansas Department of Education Grant, $28,681, 2004 – 2005.
20. "HP Technology for Teaching Grant," N. Sanjay Rebello (P.D.), Hewlett-Packard Corporation, $57,500 (equipment, stipend, travel and services), 2004 – 2005.
21. "Collaborative Project: Physics Teaching Web Advisory (Pathway) – A Digital Video Library for Physics Teaching," Dean A. Zollman (P.I. – Kansas State University), N. Sanjay Rebello (Co-P.I.), Scott Stevens (P.I. – Carnegie Mellon University) and Michael Christel (Co-P.I. – Carnegie Mellon University), National Science Foundation, $276,382, 2002 – 2005.
22. "Assessing Student Transfer and Retention of Learning in Mathematics, Physics and Engineering Courses," Andrew G. Bennett (P.I.) and N. Sanjay Rebello (Co-P.I.) National Science Foundation, Assessment of Student Achievement (ASA) Grant, National Science Foundation, $500,000, 2002 – 2007.
23. "Research on Students' Mental Models, Learning and Transfer as a Guide to Application-Based, Curriculum Development and Instruction in Physics," N. Sanjay Rebello (P.I.), CAREER/PECASE Grant, National Science Foundation $436,796, 2002 – 2008.
24. "Travel to the Second International GiREP Seminar on Quality Development in Teacher Education and Training," N. Sanjay Rebello, KSU Faculty Development Fund, $1,500, 2004.
25. "Implementing the Workshop Model and other Research-based Instructional Strategies in Physics and Mathematics Courses," N. Sanjay Rebello (P.I.), Sharon L. Challener, J. Ivan Rhode, Jon Beal, and. Karen Bolinger (Co-P.I.s), Course Curriculum & Lab Innovation (CCLI) Grant, National Science Foundation, $81,207, 1999 – 2002.
26. "Outreach Program with an Inner-City High School Physics Class," Sharon L. Challener (P.D.), N. Sanjay Rebello (Co-P.D.), Pennsylvania State System of Higher Education (SSHE) Social Equity Grant, $4,211, 1999 – 2001.
27. "Development and Implementation of Web-based Instructional Materials for Introductory Physics Courses," N. Sanjay Rebello (P.D.), Sharon L. Challener (Co-P.D.), Advancing the Development of Educators in Pennsylvania via Technology Training (ADEPTT) Grant, $4,393, 1999 – 2001.
28. "Invited Speakers in Science & Science Education," N. Sanjay Rebello (P.D.), Sharon L. Challener, John W. Heard, Joyce Overly, and Vickie Harry (Co-P.Ds), Clarion University Faculty Professional Development Council, $1,500, 1999 – 2000.
29. "Enhancing the Curriculum in the Physical Science Course for Future Elementary Teachers," N. Sanjay Rebello (P.D.), Sharon L. Challener (Co-P.D.), Clarion University-wide Faculty Development Grant, $1,050, 1998 – 1999.

Peer Reviewed Journal Publications

1. "Linking Attentional Processes and Conceptual Problem Solving: Visual Cues Facilitate the Automaticity of Extracting Relevant Information from Diagrams," Amy Rouinfar, Elise Agra,

Adam M. Larson, N. Rebello, Lester C. Loschky, Frontiers in Psychology 5:1094, 2014. doi:10.3389/fpsyg.2014.01094.

2. "Distinguishing between Change and Amount Infinitesimals in First-Semester Calculus-based Physics," Joshua Von Korff and N. Sanjay Rebello, *American Journal of Physics* 82, 695-705, 2014.
3. "Shifting College Students' Epistemological Framing Using Hypothetical Debate Problems," Dehui Hu and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 10, 010117, 2014.
4. "Using Conceptual Blending to Describe How Students Use Mathematical Integrals in Physics," Dehui Hu and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 9, 020118, 2013.
5. "Understanding Student Use of Differentials in Physics Integration Problems," Dehui Hu and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 9, 020108, 2013.
6. "An Interactive and Intelligent Learning System for Physics Education," Lakshman S. Myneni, N. Hari Narayanan, Sanjay Rebello, Amy Rouinfar and Sadhana Puntambekar, *IEEE Transactions on Learning Technology*, 6(30), 228-239, 2013.
7. "Role of Mental Representations in Problem Solving: Students' Approaches to Non-Directed Tasks," Bashirah Ibrahim and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 9, 020106, 2013.
8. "Can Short Duration Visual Cues Influence Students' Reasoning and Eye Movements in Physics Problems?" Adrian Madsen, Amy Rouinfar, Adam M. Larson, Lester C. Loschky and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 9, 020104, 2013.
9. "Representational Task Formats and Problem Solving Strategies in Kinematics and Work," Bashirah Ibrahim and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 8, 010126, 2012.
10. "Teaching Integration with Layers and Representations: A Case Study," Joshua S. Von Korff and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 8, 010125, 2012.
11. "Differences in visual attention between those who correctly and incorrectly answer physics problems," Adrian Madsen, Adam M. Larson, Lester C. Loschky, and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research* 8, 010122, 2012.
12. "Simple Activities to Improve Students' Understanding of Friction at the Microscopic Scale," Edgar D. Corpuz and N. Sanjay Rebello, *The Physics Teacher*, Vol. 50, No. 5, pp. May 2012, 293-205.
13. "Exploration of Factors that Affect the Comparative Effectiveness of Physical and Virtual Manipulatives in an Undergraduate Laboratory," Jacquelyn J. Chini, Adrian Madsen, Elizabeth Gire, N. Sanjay Rebello and Sadhana Puntambekar, *Physical Review Special Topics - Physics Education Research*, 8, 010113, 2012.
14. "Investigating Students' Mental Models and Knowledge Construction of Microscopic Friction -- Part I," Edgar D. Corpuz and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 7, 020102, 2011.
15. "Investigating Students' Mental Models and Knowledge Construction of Microscopic Friction -- Part II Implications for Curriculum Design and Development," Edgar D. Corpuz and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 7, 020103, 2011.
16. "Students' Difficulties with Integration in Electricity," Dong-Hai Nguyen and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 7, 010113, 2011.
17. "Students' Understanding and Application of the Area Under the Curve Concept in Physics Problems," Dong-Hai Nguyen and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 7, 010112, 2011.
18. "Studio Optics: Adapting Interactive Engagement Pedagogy," Christopher M. Sorensen, Dyan L. McBride and N. Sanjay Rebello, *American Journal of Physics*, Vol. 79, No. 3, March 2011, pp 320-325.

19. "Students' Difficulties with Multiple Representations in Introductory Mechanics," Dong-Hai Nguyen and N. Sanjay Rebello, *US-China Education Review*, Vol. 8, No. 2, February, 2011.
20. "Identifying Students' Mental Models of Sound Propagation: The Role of Conceptual Blending in Understanding Conceptual Change," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 6, 020114, 2010.
21. "Method for Analyzing Students' Utilization of Prior Physics Learning in New Contexts," Dyan L. McBride, D.A. Zollman and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, 6, 020101, 2010.
22. "Remedying Shortcomings of Lecture Based Physics Instruction Through Pen-Based Wireless Computing and Dy-Know Software," Zdeslav Hrepic, N. Sanjay Rebello and Dean A. Zollman, *Journal of Education Research*, Vol. 3, Issues 1 of 2, 161-190, 2009.
23. "Comparing Students' and Experts' Understanding of the Content of a Lecture," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *Journal of Science Education and Technology*, Vol. 16, No. 3, June 2007, pp. 213-224.
24. "How Many Students Does it Take Before We See the Light," Paula V. Engelhardt, Kara E. Gray, and N. Sanjay Rebello, *The Physics Teacher*, Vol. 42, April 2004, pp. 216-221.
25. "Student Explorations of Quantum Effects in LEDs and Luminescent Devices," Lawrence T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *The Physics Teacher*, Vol. 42, March 2004, pp.173-179.
26. "The Effect of Distracters on Student Performance on the Force Concept Inventory," N. Sanjay Rebello and Dean A. Zollman, *American Journal of Physics*, Vol. 72, No. 1, January 2004, pp. 116-125.
27. "Students Models of Newton's Second Law in Mechanics and Electromagnetism," Salomon F. Itza-Ortiz, N. Sanjay Rebello and Dean A. Zollman, *European Journal of Physics*, Vol. 25, January 2004, pp.81-89.
28. "The Vocabulary of Introductory Physics and Its Implications for Learning Physics," Salomon F. Itza-Ortiz, N. Sanjay Rebello, Dean A. Zollman and Manuel Rodriguez-Achach, *The Physics Teacher*, Vol. 41, No. 6, September 2003, pp.330-336.
29. "Supervised and Unsupervised Spectral Angle Classifiers," Youngsinn Sohn and N. Sanjay Rebello, *Photogrammetric Engineering and Remote Sensing*, Vol. 68, No. 12, December 2002, pg. 1261.
30. "Quantum Mechanics for Everyone: Hands-on Activities Integrated with Technology," Dean A. Zollman, N. Sanjay Rebello, and Kirsten Hogg, *American Journal of Physics*, Vol. 70, No. 3, March 2002, pp. 252-259.
31. "How to Distribute Your Software over the Web," N. Sanjay Rebello, *Computers in Science & Engineering*, Vol. 1, No. 6, Nov-Dec 1999.
32. "Simulating the Spectra of Light Sources," N. Sanjay Rebello, Chandima Cumaranatunge, Lawrence T. Escalada, and Dean A. Zollman, *Computers in Physics*, Vol. 12, No. 1, Jan-Feb, 1998.
33. "Visualizing Motion in Potential Wells," Pratibha Jolly, Dean Zollman, N. Sanjay Rebello and Albena Dimitrova, *American Journal of Physics*, Vol. 66, No. 1, January, 1998.
34. "Using DemoShield™ to Create Interactive Demos on the Web," N. Sanjay Rebello, *Computers in Physics*, Vol. 11, No. 6, Nov-Dec 1997.
35. "Computer Simulation of P-N Junction Devices," N.S. Rebello, C. Ravipati, L.T. Escalada, and D. A. Zollman, *American Journal of Physics*, Vol. 65, No. 8, 1997, pp. 765-773.
36. "Learning the Physics of a Scanning Tunneling Microscope (STM) Using a Computer Program," N. Sanjay Rebello, Konstantin Sushenko, and Dean A. Zollman, *European Journal of Physics*, Vol. 18, 1997, pp. 456-461.
37. "Computer Simulation of P-N Junction Devices," N. Sanjay Rebello, Chandramouli Ravipati, Dean A. Zollman, and Lawrence T. Escalada, *American Journal of Physics*, Vol. 95, No. 8, August 1997.
38. "Designing Interactive Web Pages Using ActiveX Controls and Scripting," N. Sanjay Rebello and Konstantin Sushenko, *Computers in Physics*, Vol. 11, No. 4, July-August, 1997.

39. "Physics for All: How Technology Can Spark Universal Success in the Physics Classroom," Lawrence T. Escalada., H. Prentice Baptiste Jr., Dean A. Zollman., N. Sanjay Rebello, *The Science Teacher*, Vol. 64, No. 2, 1997.
40. "6H silicon Carbide MOSFET Modeling for High Temperature Analog Integrated Circuits (25-500°C), N. Sanjay Rebello, Fred S. Shoucair, and J. W. Palmour, *IEEE Proceedings in Circuits Systems & Devices*, Vol. 143, No. 2, April 1996.
41. "Electrical Transport and Superconductivity in $(Y_{0.8}Ca_{0.2})Ba_2Cu_3O_y$ System with Variable Oxygen Content," Gang Xiao and N. Sanjay Rebello, *Physica C*, Vol. 211, 1993.

Journal Publications Under Review or Revision

42. "Do Perceptually Salient Elements In Physics Problems Influence Students' Eye Movements and Answer Choices?," Adrian M. Madsen, Amy Rouinfar, Adam M. Larson, Lester C. Loschky and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, under revision.
43. "Instructional Units to Facilitate Students' Application of Integration in Physics Problem Solving," Dehui Hu and N. Sanjay Rebello, *American Journal of Physics*, under review.

Journal Publications in Progress

44. "Exploring the Relationship Between Students' Eye Movements and Cognitive Constructs on Tasks with Kinematics Graphs," Bashirah Ibrahim, Adrian Madsen, Amy Rouinfar, Elizabeth Olson and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, in progress.
45. "Effect of Visual Cueing and Outcome Feedback on Problem Solving," Amy Rouinfar, Elise S. Agra, Adam Larson, Lester C. Loschky, and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, in progress.
46. "A Framework for Visual Cueing and Outcome Feedback in Physics Problem Solving," Amy Rouinfar, Elise Agra, Adam Larson, Lester C. Loschky, and N. Sanjay Rebello, *Physical Review Special Topics - Physics Education Research*, in progress.

Book Sections, Chapters and Articles

1. "Getting Started in Physics Education Research: Conceptual Understanding," N. Sanjay Rebello and Edgar G. Corpuz, in *Getting Started in PER*, C. Henderson and K. A. Harper (Eds.), *Reviews in Physics Education Research*, American Association of Physics Teachers, College Park, MD, under revision.
2. "Retention and Transfer" Andrew G. Bennett and N. Sanjay Rebello, In N. M. Seel (Ed.), *Encyclopedia of the Sciences of Learning*, edited by Springer, 2012.
3. "Remedying Shortcomings of Lecture Based Physics Instruction Through Pen-Based Wireless Computing and Dy-Know Software," Zdeslav Hrepic, N. Sanjay Rebello and Dean A. Zollman, In N. H. Salas & D. D. Peyton (Eds.), *Reading: Assessment, Comprehension and Teaching* (pp. 97-129): Nova Science Publishers, 2009, Hauppauge, NY.
4. "Transfer of Learning in Problem Solving in the Context of Mathematics and Physics," N. Sanjay Rebello, Lili Cui, Andrew G. Bennett, Dean A. Zollman and Darryl J. Ozimek in *Learning to Solve Complex Scientific Problems*, Ed. David H. Jonassen, Lawrence Earlbaum, 2007, Mahwah, NJ.
5. "Dynamic Transfer: A Perspective from Physics Education Research," N. Sanjay Rebello, Dean A. Zollman, Alicia R. Allbaugh, Paula V. Engelhardt, Kara E. Gray, Zdeslav Hrepic, and Salomon F. Itza-Ortiz, in *Transfer of Learning from a Modern Multidisciplinary Perspective*, Editor Jose P. Mestre, A volume in *Current Perspectives on Cognition, Learning and Instruction*, Senior Editor: James M. Royer, 2005, Information Age Publishing, Charlotte, NC.

Peer Reviewed Conference Proceedings

1. "Assessing Future Elementary Teachers' Pedagogical Content Knowledge in a Physics Class", Claudia Fracchiolla and N. Sanjay Rebello, *2014 Physics Education Research Conference Proceedings*, in press.

2. "Effect of Problem Solutions on Students' Reasoning Patterns on Conceptual Physics Problems", Xian Wu, Tianlong Zu, Elise Agra, and N. Sanjay Rebello, *2014 Physics Education Research Conference Proceedings,* in press.
3. "Influence of Visual Cueing on Students' Eye Movements While Solving Physics Problems," Amy Rouinfar, Elise Agra, Jeffrey Murray, Adam M. Larson, Lester C. Loschky, and N. Sanjay Rebello, *Symposium: Eye Tracking Research & Applications*, Safety Harbor, FL, March 26-28, 2014.
4. "Assessing Transfer of Learning in Problem Solving from the Perspective of Preparation for Future Learning", Dehui Hu, Joshua Von Korff, and N. Sanjay Rebello, *2013 Physics Education Research Conference Proceedings,* pp. 189-192.
5. "Effects of Argumentation Scaffolds on Student Performance on Conceptual Physics Problems", Carina M. Rebello, Lloyd H. Barrow, and N. Sanjay Rebello, *2013 Physics Education Research Conference Proceedings,* pp. 293-296.
6. "Assessing Pedagogical Content Knowledge of Future Elementary Teachers", N. Sanjay Rebello and Dean Zollman, *2013 Physics Education Research Conference Proceedings,* pp. 297-300.
7. "Can Visual Cues and Correctness Feedback Influence Students' Reasoning?" Amy Rouinfar, Elise Agra, Jeffrey Murray, Adam M. Larson, Lester C. Loschky, and N. Sanjay Rebello, *2013 Physics Education Research Conference Proceedings,* pp. 305-308.
8. "Student Epistemology About Mathematical Integration In A Physics Context: A Case Study", Joshua Von Korff, Andrew Elby, Dehui Hu, and N. Sanjay Rebello, *2013 Physics Education Research Conference Proceedings,* pp. 353-356.
9. "Characterizing Student Use of Differential Resources in Physics Integration Problems", Dehui Hu and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1513, 186, 2013.
10. "Comparing The Use of Multimedia Animations And Written Solutions in Facilitating Problem Solving", Neelam Khan, Dong-Hai Nguyen, Zhongzhou Chen, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1513, 214, 2013.
11. "Do Perceptually Salient Elements in Physics Problems Influence Students' Eye Movements and Answer Choices?", Adrian M. Madsen, Amy Rouinfar, Adam Larson, Lester Loschky, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1513, 274, 2013.
12. "Scaffolding Students' Understanding of Force in Pulley Systems", Amy Rouinfar, Adrian M. Madsen, Tram Do Ngoc Hoang, Sadhana Puntambekar and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1513, 354, 2013.
13. "Transfer of Argumentation Skills in Conceptual Physics Problem Solving", Carina M. Rebello and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1513, 322, 2013.
14. "Students' Conceptions About Rolling in Multiple Contexts", N. Sanjay Rebello and Carina M. Rebello, *AIP Conference Proceedings*, Vol. 1513, 326, 2013.
15. "Effects of Argumentation Scaffolds and Problem Representation on Students' Solutions and Argumentation Quality in Physics," Carina M. Rebello, Eleanor Sayre, and N. Sanjay Rebello, *Proceedings of the 11th International Conference of the Learning Sciences,* July 2-6, 2012, Sydney, Australia, ICLS 2012, Vol. 2, 366-370, 2012.
16. "Using ScanMatch Scores to Understand Differences in Eye Movements Between Correct and Incorrect Solvers on Physics Problems," Adrian Madsen, Adam M. Larson, Lester C. Loschky, and N. Sanjay Rebello, *Symposium: Eye Tracking Research & Applications*, Santa Barbara, CA, March 28-30, 2012.
17. "What Do Students Learn about Work in Physical and Virtual Experiments with Inclined Planes?," Jacquelyn J. Chini, Adrian Madsen, N. Sanjay Rebello, and Sadhana Puntambekar, *AIP Conference Proceedings*, Vol. 1413, 147, 2012.
18. "Scaffolding Students' Application of the 'Area Under a Curve' Concept in Physics Problems," Dehui Hu, Joshua Von Korff, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 215, 2012.

19. "Using Johnson-Laird's Cognitive Framework of Sense-making to Characterize Engineering Students' Mental Representations in Kinematics," Bashirah Ibrahim and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 219, 2012.
20. "Assessing Students' Ability to Solve Introductory Physics Problems Using Integrals in Symbolic and Graphical Representations," Neelam Khan, Dehui Hu, Dong-Hai Nguyen, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 227, 2012.
21. "Adapting a Theoretical Framework for Characterizing Students' Use of Equations in Physics Problem Solving," Carina M. Rebello and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 311, 2012.
22. "How Accurately Can Students Estimate their Performance on an Exam and how does this Relate to their Actual Performance on the Exam?" N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 315, 2012.
23. "Comparing the Development of Students' Conceptions of Pulleys Using Physical and Virtual Manipulatives," Amy Rouinfar, Adrian Madsen, T.D. N. Hoang, Sadhana Puntambekar and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 331, 2012.
24. "Assessment of Vertical Transfer in Problem Solving: Mapping the Problem Design Space," Joshua Von Korff, Dehui Hu, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1413, 379, 2012.
25. "Effects of a Prior Virtual Experience on Students' Interpretations of Real Data," Jacquelyn J. Chini, Adrian Carmichael, Elizabeth Gire, N. Sanjay Rebello, and Sadhana Puntambekar, *AIP Conference Proceedings*, Vol. 1289, 97, 2010.
26. "How Does Visual Attention Differ Between Experts and Novices on Physics Problems?" Adrian Carmichael, Adam Larson, Elizabeth Gire, Lester Loschky, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1289, 93, 2010.
27. "Comparing Student Learning in Mechanics Using Simulations and Hands-on Activities," Adrian Carmichael, Jacquelyn J. Chini, N. Sanjay Rebello, and Sadhana Puntambekar, *AIP Conference Proceedings*, Vol. 1289, 89, 2010.
28. "Investigating the Perceived Difficulty of Introductory Physics Problems," Elizabeth Gire and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1289, 149, 2010.
29. "Students' and Instructor's Impressions of Ill-structured Capstone Projects in an Advanced Electronics Lab," Nasser M. Juma, Elizabeth Gire, Kristan Corwin, Brian Washburn, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1289, 181, 2010.
30. "Facilitating Strategies for Solving Work-Energy Problems in Graphical and Equational Representations," Dong-Hai Nguyen, Elizabeth Gire, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1289, 241, 2010.
31. "The Effects of Physical and Virtual Manipulatives on Students' Conceptual Learning About Pulleys," Elizabeth Gire, Adrian Carmichael, Jacquelyn J. Chini, Amy Rouinfar, N. Sanjay Rebello, Garrett Smith, Sadhana Puntambekar, *Proceedings of the 10th International Conference of the Learning Sciences*, June 28- July 2, 2010, Chicago, IL, ICLS 2010, Vol. 1, 937-944, 2010.
32. "Can We Assess Efficiency and Innovation in Transfer?" N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1179, 241, 2009.
33. "Students' Difficulties in Transfer of Problem Solving Across Representations," Dong-Hai Nguyen and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1179, 221, 2009.
34. "Online Data Collection and Analysis in Introductory Physics," Christopher M. Nakamura, Sytil K. Murphy, Nasser M. Juma, N. Sanjay Rebello, and Dean Zollman, *AIP Conference Proceedings*, Vol. 1179, 217, 2009.
35. "Using Similarity Rating Tasks to Assess Case Reuse in Problem Solving," Frances A. Mateycik, David H. Jonassen, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1179, 201, 2009.
36. "Does the Teaching/Learning Interview Provide an Accurate Snapshot of Classroom Learning?" Jacquelyn J. Chini, Adrian Carmichael, N. Sanjay Rebello, and Sadhana Puntambekar, *AIP Conference Proceedings*, Vol. 1179, 113, 2009.

37. "Use Of Structure Maps To Facilitate Problem Solving In Algebra-Based Physics," Fran Mateycik, David H. Jonassen, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 1064, 151, 2008.
38. "Students' Understanding of Inclined Planes Using the CoMPASS Curriculum," Jacquelyn J. Haynicz, N. Sanjay Rebello, and Sadhana Puntambekar, *AIP Conference Proceedings*, Vol. 1064, 127, 2008.
39. "Hands-On and Minds-On Modeling Activities to Improve Students' Conceptions of Microscopic Friction," Edgar G. Corpuz and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 951, 73, 2007.
40. "Students' Perceptions of Case-Reuse Based Problem Solving in Algebra-Based Physics," Frances A. Mateycik, Zdeslav Hrepic, David Jonassen, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 951, 144, 2007.
41. "Students' Ideas of a Blender and P*erceptions of Scaffolding A*ctivities," Jacquelyn J. Haynicz and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 951, 116, 2007.
42. "Learning and Dynamic Transfer Using the `Constructing Physics Understanding' (CPU) Curriculum: A Case Study," Charles B. Mamolo and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 883, 77, 2007.
43. "Use of Physical Models to Facilitate Transfer of Physics Learning to Understand Positron Emission Tomography," Bijaya Aryal, Dean Zollman, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 883, 189, 2007.
44. "Impact of a Classroom Interaction System on Student Learning," Joseph Beuckman, N. Sanjay Rebello, and Dean Zollman, *AIP Conference Proceedings*, Vol. 883, 129, 2007.
45. "College Students' Transfer from Calculus to Physics," Lili Cui, N. Sanjay Rebello, and Andrew G. Bennett, *AIP Conference Proceedings*, Vol. 818, 37, 2006.
46. "Teacher-Researcher Professional Development: Case Study at Kansas State University," N. Sanjay Rebello and Peter R. Fletcher, *AIP Conference Proceedings*, Vol. 818, 129, 2006.
47. "Retention and Transfer from Trigonometry to Physics," Darryl J. Ozimek, Paula V. Engelhardt, Andrew G. Bennett, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 790, 173, 2005.
48. "Transfer Between Paired Problems In An Interview," Kara E. Gray and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 790, 157, 2005.
49. "Introductory College Physics Students' Explanations of Friction and Related Phenomena at the Microscopic Level," Edgar G. Corpuz and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 790, 153, 2005.
50. "Student goals and expectations in a large-enrollment physical science class," N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 720, 185, 2004.
51. "The Teaching Experiment – What it is and what it isn't," Paula V. Engelhardt, Edgar G. Corpuz, Darryl J. Ozimek, and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 720, 157, 2004.
52. "Implications of a framework for student reasoning in an interview," Kara E. Gray, Zdeslav Hrepic, Salomon F. Itza-Ortiz, Alicia R. Allbaugh, Paula V. Engelhardt, N. Sanjay Rebello, and Dean A. Zollman, *AIP Conference Proceedings*, Vol. 720, 125, 2004.
53. "A framework for student reasoning in an interview," Paula V. Engelhardt, Kara E. Gray, Zdeslav Hrepic, Salomon F. Itza-Ortiz, Alicia R. Allbaugh, N. Sanjay Rebello, and Dean A. Zollman, *AIP Conference Proceedings*, Vol. 720, 121, 2004.
54. "Students' Understanding and Perceptions of the Content of a Lecture," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *AIP Conference Proceedings*, Vol. 720, 189, 2004.
55. "Contemporary Physics for Future Teachers with Limited Mathematics Skills," N. Sanjay Rebello and Dean A. Zollman, *Proceedings of the Second International GiREP Seminar*, September 1-6, 2003, Udine, Italy.
56. "Enhancing the Teaching of Contemporary Physics Through Online Instruction for Teachers," Dean A. Zollman, N. Sanjay Rebello, Kirsten Hogg and Salomon F. Itza-Ortiz, *Proceedings of the Second International GiREP Seminar*, September 1-6, 2003, Udine, Italy.

57. "The Effect of Question Order on Responses to Multiple Choice Questions," Kara Gray, N. Sanjay Rebello and Dean A. Zollman, *Proceedings of the 2002 Physics Education Research Conference*, August 7-8, 2002, Boise, ID.
58. "A Summary of Students' Mental Models and Their Applications in Contexts Pertaining to Newton's II Law," Salomon F. Itza-Ortiz and N. Sanjay Rebello, *Proceedings of the 2002 Physics Education Research Conference*, August 7-8, 2002, Boise, ID.
59. "Identifying Students' Models of Sound Propagation," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *Proceedings of the 2002 Physics Education Research Conference*, August 7-8, 2002, Boise, ID.
60. "Electrical Characteristics of 6H Silicon Carbide MOSFETs (25°-500°C)," N. S. Rebello, F. S. Shoucair, and J. W. Palmour, *Proceedings of the Second International High Temperature Electronics Conference*, Section IV, June 5-10, 1994, Charlotte, NC.

Peer Reviewed Papers Presented at Conferences (Not Proceedings)

1. "Argumentation Prompts Mediating Students' Performance and Epistemic Games on Conceptual Physics Problems," N. Sanjay Rebello, Carina M. Rebello, and Lloyd H. Barrow, Paper to be presented at the *2014 Annual International Conference of the National Association for Research in Science Teaching,* March 30 – April 2, 2014, Pittsburgh, PA.
2. "College Students' Views and Use of Evidence in the Context of Conceptual Physics Problems," Carina M. Rebello, Lloyd H. Barrow, and N. Sanjay Rebello, Paper to be presented at the *2014 Annual International Conference of the National Association for Research in Science Teaching,* March 30 – April 2, 2014, Pittsburgh, PA.
3. "Visual Cueing and Feedback Influencing Undergraduate Students' Reasoning Resources on Conceptual Physics Problems," Jeffrey Murray, Amy Rouinfar, Elise Agra, Adam Larson, Lester C. Loschky, and N. Sanjay Rebello, Paper to be presented at the *2014 Annual International Conference of the National Association for Research in Science Teaching,* March 30 – April 2, 2014, Pittsburgh, PA.
4. "College Students' Views and Use of Evidence in the Context of Conceptual Physics Problems," N. Sanjay Rebello and Carina M. Rebello, Paper to be presented at the *2014 Annual International Conference of the National Association for Research in Science Teaching,* March 30 – April 2, 2014, Pittsburgh, PA.
5. "Influence of Visual Cueing and Correctness Feedback on Problem Solving," Amy Rouinfar, Elise Agra, Jeffrey Murray, Adam Larson, Lester C. Loschky, and N. Sanjay Rebello, Paper to be presented at the *2014 Annual Meeting of the American Educational Research Association,* April 3 – 7, 2014, Philadelphia, PA.
6. "Understanding Introductory Students' Use of Mathematical Integration in Physics Problem Solving," Dehui Hu and N. Sanjay Rebello, Paper presented at *2013 Annual Meeting of the American Educational Research Association,* April 27-May 1, 2013, San Francisco, CA.
7. "Effects of Gender and Argumentation Scaffolds on Students' Written Solutions and Argumentation Quality in Physics" Carina M. Rebello and N. Sanjay Rebello, Paper presented at *2013 Annual Meeting of the American Educational Research Association,* April 27-May 1, 2013, San Francisco, CA.
8. "Shifting College Students' Epistemological Framing Using Hypothetical Debate Problems," Dehui Hu and N. Sanjay Rebello, Paper presented at *2013 Annual International Conference of the National Association for Research in Science Teaching,* April 6-9, 2013, Rio Grande, Puerto Rico.
9. "Do Students' Eye Movements Reveal Their Strategies for Solving Physics Problems?" Elizabeth Olson, Bashirah Ibrahim, Adrian Madsen, Amy Rouinfar, N. Sanjay Rebello, Paper presented at *2013 Annual International Conference of the National Association for Research in Science Teaching,* April 6-9, 2013, Rio Grande, Puerto Rico.

10. "Optimism Bias Affecting College Students' Post Predictions of Exam Performance" N. Sanjay Rebello, and Carina M. Rebello, Paper presented at *2013 Annual International Conference of the National Association for Research in Science Teaching*, April 6-9, 2013, Rio Grande, Puerto Rico.
11. "Students' Visual Attention While Using an Online Physics Tutoring System" Amy R. Rouinfar, Christopher Nakamura, N. Sanjay Rebello, and Dean A. Zollman, Paper presented at *2013 Annual International Conference of the National Association for Research in Science Teaching*, April 6-9, 2013, Rio Grande, Puerto Rico.
12. "Influence of Visual Cues on Eye Movements and Reasoning in Physics Problems," Adrian Madsen and N. Sanjay Rebello, Paper presented at the *2012 Annual Meeting of the American Educational Research Association*, April 13-17, 2012, Vancouver, British Columbia, Canada.
13. "College students understanding of mathematical equations in non-mathematical contexts," Carina M. Rebello and N. Sanjay Rebello, Paper presented at the *2012 Annual Meeting of the American Educational Research Association*, April 13-17, 2012, Vancouver, British Columbia, Canada.
14. "Comparing Physical and Virtual Manipulatives for Retention and Preparation for Future Learning of Science Concepts," Amy Rouinfar and N. Sanjay Rebello, Paper presented at the *2012 Annual International Conference of the National Association for Research in Science Teaching*, March 25-28, 2012, Indianapolis, IN.
15. "College Students' Views of the Use of Mathematics in Physics: A Case Study of Two Cohorts", N. Sanjay Rebello and Carina M. Rebello, Paper presented at the *2012 Annual International Conference of the National Association for Research in Science Teaching*, March 25-28, 2012, Indianapolis, IN.
16. "Guiding Attention on Physics Problems Using Visual Cues Modeled After Experts' Eye Movements," Adrian Madsen, Adam Larson, Amy Rouinfar, Lester Losckhy and N. Sanjay Rebello, Paper presented at the *2012 Annual International Conference of the National Association for Research in Science Teaching*, March 25-28, 2012, Indianapolis, IN.
17. Investigating Students' Transfer of Learning in the Context of Physics Problem Solving Using a Computer-based Dynamic Assessment," Dehui Hu, Joshua Von Korff, and N. Sanjay Rebello, Paper presented at the *2012 Annual International Conference of the National Association for Research in Science Teaching*, March 25-28, 2012, Indianapolis, IN.
18. "Categorizing Students' Kinds of Mental Representations during Problem Solving of Different Representational Task Formats," Bashirah Ibrahim and N. Sanjay Rebello, Paper presented at the *2012 Annual International Conference of the National Association for Research in Science Teaching*, March 25-28, 2012, Indianapolis, IN.
19. "Teaching-Learning Interviews to Understand and Remediate Student Difficulties with Fourier Series Concepts," Chen Jia, Steve Warren, Dong-Hai Nguyen, Sanjay Rebello, and Andrew Bennett, Paper presented at the *2011 Annual Conference and Exposition, American Society for Engineering Education*, June 26-29, 2011, Vancouver, British Columbia, Canada.
20. "Tutorials to Facilitate Students' Representational Skills for Problem Solving in Introductory College Physics," Dong-Hai Nguyen, Elizabeth Gire and N. Sanjay Rebello, Paper presented at *2011 Annual Meeting of the American Educational Research Association*, April 8-12, 2011, New Orleans, LA.
21. "Characterizing Students' Use of Graphs in Introductory Physics with a Graphical Analysis Epistemic Game," Elizabeth Gire, Dong-Hai Nguyen and N. Sanjay Rebello, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.
22. "Students' Understanding of Mathematical Integration in Physics Problems Using Graphical and Algebraic Representations," Dong-Hai Nguyen and N. Sanjay Rebello, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.
23. "Collaborative Activities, Discourse and Self-Reported Learning of Students Working on Ill-Structure Capstone Projects," Nasser M. Juma, Elizabeth Gire, Brian Washburn, Kristan Corwin

and N. Sanjay Rebello, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.

24. "Comparing the Effects of Sequencing of Physical and Virtual Manipulatives on Student Learning and Confidence," Adrian Carmichael, Jacquelyn J. Chini, Elizabeth Gire, N. Sanjay Rebello and Sadhana Puntambekar, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.
25. "Comparing Benefits of Hypertext Exploration versus Virtual Experimentation on Students" Analysis of Physical Experiments," Jacquelyn J. Chini, Adrian Carmichael, Elizabeth Gire, N. Sanjay Rebello and Sadhana Puntambekar, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.
26. "Effects of Visual Attentional Cueing on Beginner Problem Solvers in Physics," Tanner Stevens, Adrian Carmichael, Adam Larson, Elizabeth Gire, Lester C. Loschky and N. Sanjay Rebello, Paper presented at the *2011 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2011, Orlando, FL.
27. "Comparing Students' Performance with Physical and Virtual Manipulatives in a Simple Machines Curriculum," Jacquelyn J. Chini, Adrian Carmichael, N. Sanjay Rebello, Elizabeth Gire, and Sadhana Puntambekar, Paper presented at the *2010 Annual Meeting of the American Educational Research Association*, April 30 - May 4, 2010, Denver, CO.
28. "Comparing the Effects of Physical and Virtual Experimentation Sequence on Students' Understanding of Mechanics," Adrian Carmichael, Jacquelyn J. Chini, Sadhana Puntambekar, Elizabeth Gire, and N. Sanjay Rebello, Paper presented at the *2010 Annual Meeting of the American Educational Research Association*, April 30 - May 4, 2010, Denver, CO.
29. "Comparing Students' Performance and Reasoning with Physical and Virtual Manipulatives to Learn about Pulleys," Jacquelyn J. Chini, Amy Rouinfar, Adrian Carmichael, Sadhana Puntambekar, and N. Sanjay Rebello, Paper presented at the *2010 Annual International Conference of the National Association for Research in Science Teaching*, March 23 - 27, 2010, Philadelphia, PA.
30. "Students' Rating of Problem Similarity as a Measure of Problem Solving Expertise," Frances A. Mateycik, N. Sanjay Rebello and David Jonassen, Paper presented at the *2010 Annual International Conference of the National Association for Research in Science Teaching*, March 23 - 27, 2010, Philadelphia, PA.
31. "Facilitating Students' Problem Solving Across Representations in Introductory Physics," Dong-Hai Nguyen and N. Sanjay Rebello, Paper presented at the *2010 Annual International Conference of the National Association for Research in Science Teaching*, March 23 - 27, 2010, Philadelphia, PA.
32. "Qualitative Analysis of the Effects of Sequence of Physical and Virtual Activities on Student Conceptual Understanding in Mechanics," Adrian Carmichael, Jacquelyn J. Chini, Sadhana Puntambekar, N. Sanjay Rebello, Paper presented at the *2010 Annual International Conference of the National Association for Research in Science Teaching*, March 23 - 27, 2010, Philadelphia, PA.
33. "Investigating Change and Consistency in Introductory College Students' Understanding about Pulleys," Amy Rouinfar, Jacquelyn J. Chini, Adrian Carmichael, Sadhana Puntambekar, and N. Sanjay Rebello, Paper presented at the *2010 Annual International Conference of the National Association for Research in Science Teaching*, March 23 - 27, 2010, Philadelphia, PA.
34. "Do Structure Maps Facilitate Expert-Like Problem Solving Strategies in Physics?" Frances A. Mateycik, N. Sanjay Rebello, David H. Jonassen, Paper presented at the *2009 Annual International Conference of the National Association for Research in Science Teaching*, April 17 – April 21, 2009, Garden Grove, CA.
35. "Future Elementary Teachers Integrating Hypertext with Hands-on Experimentation in a Design-Based Context," Jacquelyn J. Chini, N. Sanjay Rebello, Sadhana Puntambekar, Paper presented at

the *2009 Annual International Conference of the National Association for Research in Science Teaching*, April 17 – April 21, 2009, Garden Grove, CA.

36. "Investigating Dynamic Transfer in Multiple Contexts: Overarching Theoretical Framework and Methodology" N. Sanjay Rebello and Dean A. Zollman, Paper presented at the *2008 Annual International Conference of the National Association for Research in Science Teaching*, March 30 – April 2, 2008, Baltimore, MD.
37. "Future Elementary Teachers' Epistemological Beliefs and Views About the Nature of Science" Charles B. Mamolo and N. Sanjay Rebello, Paper presented at the *2008 Annual International Conference of the National Association for Research in Science Teaching*, March 30 – April 2, 2008, Baltimore, MD.
38. "Scaffolding Activities to Facilitate Student Modeling of Microscopic Friction" Edgar G. Corpuz and N. Sanjay Rebello, Paper presented at the *2008 Annual International Conference of the National Association for Research in Science Teaching*, March 30 – April 2, 2008, Baltimore, MD.
39. "Learning to Solve Problems by Scaffolding Analogical Encoding," D.H. Jonassen, S. Rebello, C. Wexler, Z. Hrepic, & G. Triplett, Paper presented at the *2007 American Society for Engineering Education Conference*, June 24-27, 2007, Honolulu, HI.
40. "Consolidating Traditional and Contemporary Perspectives of Transfer of Learning: A Framework and Implications," N. Sanjay Rebello, Paper presented at the *2007 Annual International Conference of the National Association for Research in Science Teaching*, April 15-18, 2007, New Orleans, LA.
41. "How Does a Classroom Interaction System Affect Student Performance?" N. Sanjay Rebello and Joseph P. Beuckman, Paper presented at the *2007 Annual International Conference of the National Association for Research in Science Teaching*, April 15-18, 2007, New Orleans, LA.
42. "Assessing College Students' Transfer of Learning from Calculus to Physics Using Non-Traditional Problems" Lili Cui, N. Sanjay Rebello, and Andrew G. Bennett, Paper presented at the *2007 Annual International Conference of the National Association for Research in Science Teaching*, April 15-18, 2007, New Orleans, LA.
43. "Dynamic Transfer in the Context of Microscopic Friction: Case Study with an Introductory College Student," Edgar G. Corpuz, and N. Sanjay Rebello, Paper presented at the *2006 Annual Meeting of the American Educational Research Association*, April 7-11, 2006, San Francisco, CA.
44. "A Framework for Integrated Professional Development," N. Sanjay Rebello and Peter Fletcher, Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.
45. "College Students' Ideas About Some Everyday Electrical Devices," Jacquelyn J. Haynicz, Peter R. Fletcher, and N. Sanjay Rebello, Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.
46. "Dynamic Transfer and Learning Using a Constructivist-Based Curriculum," Charles B. Mamolo, Peter R. Fletcher and N. Sanjay Rebello, Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.
47. "Students' Conceptual Development in the Context of Microscopic Friction: A Case Study with Two Students," Edgar Corpuz and N. Sanjay Rebello, Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.
48. "Students' Epistemic Modes While Making Sense of Action Movie Clips," Carina M. Poltera, Peter Fletcher, and N. Sanjay Rebello in Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.
49. "Transfer of Learning from College Calculus to Physics Courses," Lili Cui, N. Sanjay Rebello, and Andrew Bennett in Paper presented at the *2006 Annual International Conference of the National Association for Research in Science Teaching*, April 3-6, 2006, San Francisco, CA.

50. "Eliciting and Representing Hybrid Mental Models," Zdeslav Hrepic, Dean Zollman and Sanjay Rebello, Paper presented at the *2005 Annual International Conference of the National Association for Research in Science Teaching*, April 4-7, 2005, Dallas, TX.
51. "Investigating Introductory College Students' Knowledge Of The Particulate Nature Of Matter," Lili Cui, Dean Zollman and N. Sanjay Rebello, Paper presented at the *2005 Annual International Conference of the National Association for Research in Science Teaching*, April 4-7, 2005, Dallas, TX.
52. "Introductory College Physics Students' Mental Models of Friction and Lubrication at the Microscopic Level," Edgar G. Corpuz and N. Sanjay Rebello, Paper presented at the *2005 Annual International Conference of the National Association for Research in Science Teaching*, April 4-7, 2005, Dallas, TX.
53. "A Model for Dynamic Transfer of Learning," N. Sanjay Rebello and Dean Zollman, Paper presented at the *2005 Annual International Conference of the National Association for Research in Science Teaching*, April 4-7, 2005, Dallas, TX.
54. "A Framework for the Dynamics of Student Reasoning in an Interview," Salomon F. Itza-Ortiz, Alicia R. Allbaugh, Paula V. Engelhardt, Kara E. Gray, Zdeslav Hrepic, N. Sanjay Rebello and Dean A. Zollman, Paper presented at the *2004 Annual International Conference of the National Association for Research in Science Teaching*, April 1-3, 2004, Vancouver BC, Canada.
55. "Students' Mental Models of Newton's Second Law: Mechanics to Electromagnetism," N. Sanjay Rebello, Salomon F. Itza-Ortiz and Dean A. Zollman, Paper presented at the *2003 Annual International Conference of the National Association for Research in Science Teaching*, March 23-26, 2003, Philadelphia, PA.
56. "The Vocabulary of Physics and Its Impact on Student Learning," Salomon F. Itza-Ortiz, N. Sanjay Rebello and Dean A. Zollman, Paper presented at the *2003 Annual International Conference of the National Association for Research in Science Teaching*, March 23-26, 2003, Philadelphia, PA.
57. "Contemporary Physics for Non-Science Students: Combining Visualization with Hands-on Activities," Dean A. Zollman and N. Sanjay Rebello, *Preliminary Case Studies in Information Technology*, presented by the National Research Council's Committee on Undergraduate Education, Case 8, March, 1997.

Instructional Materials

1. "Visual Quantum Mechanics," Dean A. Zollman, N. Sanjay Rebello, et al., *Ztek*, Lexington, KY and Arbor Scientific, Ann Arbor, MI, 2003.

Invited Talks

1. "Facilitating Transfer of Learning and Problem Solving in Physics," N. Sanjay Rebello, Invited Talk, *American Physical Society Prairie Section Fall Meeting*, University of Missouri, Columbia, MO, November 7-9, 2013.
2. "Transfer of Learning and Implications for Physics Education," N. Sanjay Rebello, Keynote Speaker, *American Association of Physics Teachers Illinois State Section Fall Meeting*, Heartland Community College, Bloomington, IL, October 4-5, 2013.
3. "From the Art of Teaching to the Science of Learning: Using Evidence- and Research-based Strategies in the Classroom," N. Sanjay Rebello, *Provost Lecture Series*, Kansas State University, Manhattan, KS, April 25, 2013.
4. "Research on Transfer of Learning: Implications for Interdisciplinary STEM Education," N. Sanjay Rebello, *College of Science Interdisciplinary Science Curriculum Seminar*, Virginia Tech, Blacksburg, VA, February 12, 2013.
5. "My Vision for Lifelong Learning in the Sciences," N. Sanjay Rebello, *College of Education*, University of Missouri, St. Louis, MO, October 10, 2012.

6. "Research on Transfer of Learning: Implications for Instruction," N. Sanjay Rebello, *Department of Physics Colloquium*, Kansas State University, Manhattan KS, September 11, 2012.
7. "Research on Transfer and Implications for Instruction," N. Sanjay Rebello, *Center for Science & Mathematics Education Seminar*, State University of New York, Stony Brook, NY, July 12, 2012.
8. "Research on Transfer and Implications for Learning and Problem Solving," N. Sanjay Rebello, *Physics Department Seminar*, McGill University, Montreal, Canada, April 24, 2012.
9. "A Vision for the Engineering and Science Education Department (ESED) at Clemson," N. Sanjay Rebello, *Department of Engineering and Science Education*, Clemson University, April 6, Clemson, SC, 2012.
10. "Using Eye Movements to Gain Insight Into Physics Problem Solving: Work in Progress," *Psychology Department Cognitive Seminar*, Kansas State University, December 06, 2011, Manhattan, KS.
11. "Research on Transfer of Learning & Implications for Learning and Problem Solving in Physics," N. Sanjay Rebello, *Department of Engineering and Science Education Seminar*, Clemson University, November 18, Clemson, SC, 2011.
12. "Student Difficulties with Integration in Physics Problem Solving," N. Sanjay Rebello, Elizabeth Gire and Dong-Hai Nguyen, *Physics Colloquium*, University of Central Florida, February 18, Orlando, FL, 2011.
13. "Can Problem Solving in Physics Facilitate Conceptual Change in Mathematics?", N. Sanjay Rebello, Elizabeth Gire and Dong-Hai Nguyen, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
14. "Transfer of Learning from Mathematics to Physics," N. Sanjay Rebello, *Integrating Science and Mathematics Education Research into Teaching National Conference*, June 20-23, Orono, ME, 2010.
15. "Representational Fluency in Learning and Problem Solving in Physics," N. Sanjay Rebello and Elizabeth Gire, *Transforming Research in Undergraduate STEM Education Conference*, June 14-18, Orono, ME, 2010.
16. "Representational Competence in Learning and Problem Solving in Physics Education," N. Sanjay Rebello, *Physics Education Research Seminar*, Ohio State University, April 12, Columbus, OH, 2010.
17. "How Sequencing of Representations Can Influence Learning and Problem Solving," N. Sanjay Rebello, *Physics Education Research Seminar*, University of Illinois, Urbana-Champaign, April 21, Urbana, IL, 2010.
18. "Representational Competence in Learning and Problem Solving in Physics Education," N. Sanjay Rebello, *Physics Education Research Seminar*, Rutgers University, March 25, Rutgers, NJ, 2010.
19. "Research in Conceptual Understanding – Foundations and Future Challenges," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 26 – 29, 2009, Ann Arbor, MI.
20. "Students' Perceptions of Research-Based Problem Solving Strategies in Physics," *Kansas College Chemistry Teacher's Conference*, April 25, 2008, Manhattan, KS.
21. "Facilitating Case Reuse for Problem Solving and Building Conceptual Schema," N. Sanjay Rebello, *Seminar*, University of Missouri, Columbia, MO, March 2008.
22. "Transfer of Learning from Calculus to Physics," Lili Cui, N. Sanjay Rebello, and Andrew G. Bennett, *American Association of Physics Teachers Winter Meeting*, January 19 –23, 2008, Baltimore, MD, 2008.
23. "Beyond Clickers: Web-based Wireless Interactivity for the Physics Classroom," Dean A. Zollman, N. Sanjay Rebello, and Zdeslav Hrepic, *American Association of Physics Teachers Winter Meeting*, January 19 –23, 2008, Baltimore, MD.
24. "Conceptual Change and Transfer: Consolidating Varying Viewpoints," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Greensboro, NC, July 2007.

25. "Transfer of Learning: Implications for Research, Curriculum Design & Instruction," N. Sanjay Rebello, Colloquium, *Center for Teaching & Learning*, March 2007, Southern Illinois University, Edwardsville, IL.
26. "Transfer of Learning: Implications for Physics Education Research & Curriculum Development," N. Sanjay Rebello, *Physics Department Colloquium*, February 2006, University of Maine, Orono, ME.
27. "Managing Cognitive Conflict in a Teaching Interview," Peter R. Fletcher, Edgar G. Corpuz, and N. Sanjay Rebello, *Frontiers & Foundations in Physics Education Research Conference*, July 2005, Bar Harbor, ME.
28. "Transfer of Learning as a Guide to Application-based Curriculum Development in Physics," N. Sanjay Rebello, *Physics Department Colloquium*, April 2005, Southern Illinois University Edwardsville, IL.
29. "PDA-based Classroom Response System at KSU," N. Sanjay Rebello, *Technology Roundtable*, Hale Library, Kansas State University, October 2005.
30. "Changing Distracters on Questions of the Force Concept Inventory," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
31. "Dynamic Transfer of Learning in Physics Education Research," N. Sanjay Rebello, *APS April Meeting*, May 1-4, 2004, Denver, CO.
32. "Transfer of Learning & Application-based Curriculum Development," N. Sanjay Rebello, *Physics Department Colloquium*, Kansas State University, March 30, 2004.
33. "Contemporary Physics for Future Teachers with Limited Mathematics Skills," N. Sanjay Rebello and Dean A. Zollman, *Second International GiREP Seminar*, September 1-6, 2003, Udine, Italy.
34. "Enhancing the Teaching of Contemporary Physics Through Online Instruction for Teachers," Dean A. Zollman, N. Sanjay Rebello, Kirsten Hogg and Salomon F. Itza-Ortiz, *Second International GiREP Seminar*, September 1-6, 2003, Udine, Italy.
35. "Physics Education Research as a Guide to Application-based Curriculum Development," N. Sanjay Rebello, *Fall Meeting of the Western Pennsylvania Section of the AAPT*, October 24, 2003, Latrobe, PA.
36. "Visual Quantum Mechanics – hands-on activities integrated with computer visualizations," N. Sanjay Rebello, *Physics Department Colloquium*, March 4, 2002, Missouri State University, Springfield, MO.
37. "Adapting Research-Based Pedagogy in an Algebra-Trigonometry Physics Course," N. Sanjay Rebello, *AAPT Summer Meeting*, Rochester, NY, August, 2001.
38. "Adapting Research-Based Pedagogy: Lessons Learned," N. Sanjay Rebello, *Physics Department Colloquium*, Kansas State University, February 01, 2001.
39. "The New Multimedia Physics-Mathematics Lab" N. Sanjay Rebello and John W. Heard, Invited Presentation & Demonstration to the *Department Chairs Council of the Dean of the College of Arts & Sciences*, Clarion University of PA, October 09, 2000.
40. "Student Surveys in a Web-Assisted Course," N. Sanjay Rebello, *Technology Chalkboard Workshop*, Clarion University, July 17-21, 2000.
41. "Using CourseInfo: Lessons Learned," N. Sanjay Rebello, *Teaching with Technology Forum*, ADEPTT Learning Center, Clarion University of PA, November 12, 1999.
42. "Learning the Physics of a Scanning Tunneling Microscope (STM) Using a Computer Program," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, San Antonio, TX, August 2-8, 1999.
43. "Energy Diagram Explorer," N. Sanjay Rebello, Chandima Cumaranatunge and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, Anaheim, CA, January 3-9, 1999.
44. "Visual Quantum Mechanics: Explorations of the Quantum World for Non-Science Students," N. Sanjay Rebello, *Seminar Series, Center for Innovation in Learning*, Carnegie-Mellon University, November 20, 1998.

45. "Interactive Web-based Applications Using ActiveX Controls and Scripting," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
46. "Energy Band Creator," N. Sanjay Rebello, Chandima Cumaranatunge, Lawrence T. Escalada, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
47. "Scanning Tunneling Microscope (STM) Simulator," N. Sanjay Rebello, Konstantin Sushenko, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
48. "Wave Function Suite," N. Sanjay Rebello, C. Cumaranatunge, Gary Dong, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
49. "Spectroscopy," N. Sanjay Rebello, Chandima Cumaranatunge, Lawrence T. Escalada, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 4-9, 1997, Phoenix, AZ.
50. "Semiconductor Device Simulator," N. Sanjay Rebello, Chandra M. Ravipati, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 4-9, 1997, Phoenix, AZ.

Invited Posters

1. "Problem Solving and Motivation – Getting our Students in Flow," N. Sanjay Rebello & Dean A. Zollman, *Invited Targeted Poster Session, 2013 Physics Education Research Conference,* July 17-18, 2013, Portland, OR. Paper published in *AIP Conference Proceedings*, 2013.
2. "An Instructional Framework for Developing Adaptive Expertise Through Sequencing Horizontal and Vertical Transfer Tasks," N. Sanjay Rebello, Lili Cui, Dong-Hai Nguyen, and Dean Zollman, Poster presented at the *2013 Annual Meeting of the American Educational Research Association,* April 27-May 1, 2013, San Francisco, CA.
3. "Comparing Students' Performance On Research-based Conceptual Assessments And Traditional Classroom Assessments," N. Sanjay Rebello, *Invited Targeted Poster Session, 2011 Physics Education Research Conference*, August 3-4, 2011, Omaha, NE. Paper published in *AIP Conference Proceedings*, Vol. 1413, 66, 2012.
4. "Facilitating Students' Problem Solving Across Multiple Representations in Introductory Mechanics," Dong-Hai Nguyen, Elizabeth Gire, and N. Sanjay Rebello, Invited Targeted Poster Session, *2010 Physics Education Research Conference*, July 21 - 22, 2010, Portland. Paper published in *AIP Conference Proceedings,* Vol. 1289, 45, 2010.
5. "Transfer of Learning: Implications for Research, Curriculum Development and Instruction," N. Sanjay Rebello, *AAPT Summer Meeting*, Syracuse, NY, July 2006.
6. "Student reasoning during an interview: A possible framework and implications," Alicia R. Allbaugh, Paula V. Engelhardt, Kara E. Gray, Zdeslav Hrepic, Salomon F. Itza-Ortiz and N. Sanjay Rebello, Invited Targeted Poster Session, *2003 Physics Education Research Conference*, August 6-7, 2003, Madison, WI.
7. "Analyzing Movies over the Web," N. Sanjay Rebello, *Advancing the Development of Educators in Pennsylvania via Technology Training* (ADEPTT) Conference, Clarion, PA, October 16, 1999.

Contributed Talks

1. "Assessing Future Elementary Teachers' Pedagogical Content Knowledge," Claudia Fracchiolla and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minneapolis, MN, July 26-30, 2014.
2. "Influence of Visual Cueing and Correctness Feedback on Problem Solving," Elise Agra, Xian Wu, Mitchell Burkett, Lester C. Loschky, N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minneapolis, MN, July 26-30, 2014.

3. "Visual Cues Increase Efficiency in Extracting Relevant Information from Diagrams," Amy Rouinfar, Elise Agra, Adam M. Larson, Lester C. Loschky, N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minneapolis, MN, July 26-30, 2014.
4. "The Effects of Problem-solving Training on Students' Reasoning Abilities," Xian Wu, Elise Agra, Claudia Fracchiolla, N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minneapolis, MN, July 26-30, 2014.
5. "Tracking Eye Movements While Viewing Motion Graphs," Jennifer L. Docktor, Jose Mestre, Elizabeth Gire, N. Sanjay Rebello, and Adrian Madsen, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
6. "Influence of Visual Cueing and Feedback on Physics Problem Solving," Amy Rouinfar, Jeffrey Murray, Adam M. Larson, Lester C. Loschky and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
7. "Pedagogical Content Knowledge in a Course for Future Elementary Teachers," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
8. "Eye Movements While Interpreting Graphical Representations of Motion," Jennifer L. Docktor, Jose Mestre, Elizabeth Gire, N. Sanjay Rebello, and Adrian Madsen, *American Association of Physics Teachers Winter Meeting*, New Orleans, LA, January 5-9, 2013.
9. "A Taxonomy of Infinitesimals in First-Semester Introductory Physics," Joshua S. Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, New Orleans, LA, January 5-9, 2013.
10. "Problem Solving Strategies: Effect of Topic and Nature of Solutions," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
11. "Problem Solving Strategies: Effect of Topic and Nature of Solutions," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
12. "Impact of Argumentation Scaffolds on Performance on Conceptual Physics Problems," Carina M. Rebello and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
13. "An Eye Tracking Analysis of Physics Representations," Jennifer L. Docktor, Jose Mestre, Liz Gire and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
14. "Do "Eye Catching" Features in Physics Problems Influence Answer Choices?," A. Madsen, Adrian Madsen, Amy Rouinfar, Adam Larson, Lester Loschky and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
15. "Exploring Representational Fluency with Eye-Tracking?," Elizabeth Gire, Jennifer L. Docktor, N. Sanjay Rebello and Jose Mestre, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
16. "Understanding Students' Use of Integration in Physics Problem Solving," Dehui Hu and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
17. "Assessing Student Understanding of Integrals Using Correspondence Between Representations," Joshua Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
18. "Students' Prediction of Their Exam Performance: Comparison of Two Cohorts," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
19. "Investigating the Development of Students' Scientific Conceptions of Pulleys," Amy Rouinfar, Adrian M. Madsen, Tram Do Ngoc Hoang, N. Sanjay Rebello, and Sadhana Puntambekar,

American Association of Physics Teachers Summer Meeting, Philadelphia, PA, July 28-August 1, 2012.

20. "Problem Solving Strategies with Representational Format and Context," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Ontario, CA, February 4-8, 2012.
21. "Instruction about Integral Calculus in Introductory Mechanics Using Debate Problems and Multiple Modes of Communication," Joshua S. Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Ontario, CA, February 4-8, 2012.
22. "Scaffolding Students' Development of Mental Models for Pulleys Systems," Amy Rouinfar, Adrian Madsen, Tram Do Ngoc Hoang, N. Sanjay Rebello and Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
23. "Tutorials to Facilitate Physics Problem Solving with Differentiation and Integration," Dehui Hu, Joshua Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
24. "Comparing Students, Individual and Group Work in an Electronics Lab," Nasser M. Juma, N. Sanjay Rebello, Kristan L. Corwin and Brian R. Washburn, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
25. "Relationship between Students' Predicted Score and Actual Score on Class Exams," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
26. "The Influence of Hints and Training on Student Resource Selection PER: Problem Solving I," Joshua S. Von Korff, Dehui Hu, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
27. "The Relationship between Students' Mental Representations and their Translational Skills," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
28. "Visual Cueing Influencing Eye Movements and Reasoning in Physics Problems," Adrian Madsen, Adam Larson, Lester Loschky, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
29. "Tutorials to Facilitate Students' Learning of Integration in Physics," N. Sanjay Rebello & Dong-Hai Nguyen, *American Association of Physics Teachers Winter Meeting*, Jacksonville, FL, 2011.
30. "Research Exploring TA's Knowledge About Student Problem Solving," Joshua S. Von Korff, Dehui Hu and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Jacksonville, FL, 2011.
31. "Facilitating Problem Solving Across Representations in Introductory Electricity & Magnetism," Dong-Hai Nguyen, Elizabeth Gire & N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
32. "Comparing Expert and Novice Eye Movements While Solving Physics Problems,' Adrian Carmichael, Adam Larson, Elizabeth Gire, Lester Loschky and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
33. "Assessing Compare and Contrast Physical Activities Integrating in College Algebra-based Physics," Frances A. Mateycik, Nobel S. Rebello and David H. Jonassen, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
34. "Enhancing Students' Understanding of Electronics and Instrumentation through Capstone Projects," Nasser Juma, Elizabeth Gire, Brian Washburn, Kristan Corwin and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
35. "How Physical and Virtual Experiments Influence Students' Understanding of Pulleys," Jacquelyn J. Chini, Elizabeth Gire, Adrian Carmichael, N. Sanjay Rebello and Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
36. "Applying a Framework for Assessing Efficiency & Innovation in Problem Solving," N. Sanjay Rebello & Elizabeth Gire, *AAPT/APS Joint Winter Meeting*, Washington, DC, 2010.

37. "Students'' Views of Data Collected from Physical and Virtual Manipulatives," Jacquelyn Chini, Elizabeth Gire, Adrian Carmichael, N. Sanjay Rebello and Sadhana Puntambekar, *AAPT/APS Joint Winter Meet*ing, Washington, DC, 2010.
38. "Identifying Conceptual Schema Adaptation Using Similarity Ratings in Algebra-based Physics," Frances A. Mateycik, N. Sanjay Rebello and David Jonassen, *AAPT/APS Joint Winter Meeting*, Washington, DC, 2010.
39. "Using an ECR Framework to Characterize Problem Difficulty," Elizabeth Gire and N. Sanjay Rebello, *AAPT/APS Joint Winter Meeting*, Washington, DC, 2010.
40. "Exploring Benefits of Physical and Virtual Manipulatives in Simple Machines, Jacquelyn J. Chini, Adrian Carmichael, N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 9-10, 2009, Manhattan, KS.
41. "Integrating Experimentation and Instrumentation in an Electronics Course Using LabVIEW and NI ELVIS," Nasser Juma, N. Sanjay Rebello, Kristan Corwin, Brian Washburn, *Fall Meeting of the A-O-K Section of the AAPT*, October 9-10, 2009, Manhattan, KS.
42. "Interview Room versus Classroom: How Do the Data Compare?" Jacquelyn J. Chini, Adrian Carmichael, N. Sanjay Rebello, Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI
43. "Effectiveness of Hands-on Experiments versus Computer Simulations in Mechanics," Adrian Carmichael, Jacquelyn J. Chini, N. Sanjay Rebello, Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
44. "Students' Performance on Similarity Rating and Case Reusability Tasks," Frances A. Mateycik, N. Sanjay Rebello, David H. Jonassen, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
45. "Individual Teaching/Learning Interviews to Facilitate Student Problem Solving," Dong-Hai Nguyen and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Ann Arbor, MI, 2009.
46. "ALT-Pathway: Synthetic Tutors for Probing Student Learning," Chris M. Nakamura, Sytil K. Murphy, Nasser M. Juma, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
47. "Group Learning Interviews to Facilitate Case-Reuse in Problem Solving," N. Sanjay Rebello, Fran Mateycik, David Jonassen, *American Association of Physics Teachers Winter Meeting*, February 14-19, 2009, Chicago, IL.
48. "Assessing Case Reuse Strategies Using Nontraditional Physics Problems," Frances A. Mateycik, David Jonassen, and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, February 14-19, 2009, Chicago, IL.
49. "Optics Studio Interactive Engagement in an Upper Level Physics Course," Christopher M. Sorensen, Sanjay Rebello, and Zenghu Chang, *American Association of Physics Teachers Winter Meeting*, February 14-19, 2009, Chicago, IL.
50. "Students' Ideas of Force – Distance Tradeoff in an Inclined Plane," Jacquelyn J. Chini, N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 19 –23, 2008, Edmonton, Canada.
51. "Text-editing, Problem posing and Jeopardy Tasks in Introductory Physics," Frances A. Mateycik, David H. Jonassen, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 19 –23, 2008, Edmonton, Canada.
52. "Group Learning Interviews to Facilitate Problem Solving Using Structure Maps," N. Sanjay Rebello, Frances A. Mateycik, and David H. Jonassen, *American Association of Physics Teachers Summer Meeting*, July 19 –23, 2008, Edmonton, Canada.
53. "Seventh-Grade Students' Ideas of Force and Work in Simple Machines," N. Sanjay Rebello, Mary J. Leonard, and Sadhana Puntambekar, *American Association of Physics Teachers Winter Meeting*, January 19 –23, 2008, Baltimore, MD, 2008.

54. "Teaching Electromagnetic Motors in Context: Students' Views," Jacquelyn Haynicz and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 19-20, 2007, Conway, AR.
55. "Students' Perceptions of Research-Based Problem Solving Strategies in Physics," Frances A. Mateycik, Zdeslav Hrepic, David Jonassen and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 19-20, 2007, Conway, AR.
56. "Physics Education Research: What it is and What it isn't," N. Sanjay Rebello and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October 19-20, 2007, Conway, AR.
57. "How Upper-division Physics Students Respond to a Studio Laboratory Activity," Frances A. Mateycik, Dyan McBride, N. Sanjay Rebello and Christopher M. Sorensen, *American Association of Physics Teachers Summer Meeting*, July 27 –31, 2007, Greensboro, NC.
58. "Do Future Teachers' Views About Science Change After a Single Course?" N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 27 –31, 2007, Greensboro, NC.
59. "Facilitating Student Understanding of Motors in an Everyday Context," Jacquelyn J. Haynicz and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 27 –31, 2007, Greensboro, NC.
60. "Future Elementary Teachers' Epistemic Beliefs and Views About the Nature of Science," N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 6 –11, 2007, Seattle, WA.
61. "Probing and Improving Student Understanding of Common Electrical Devices," Jacquelyn Haynicz and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, Octer 27-28, 2006, Emporia, KS.
62. "Exploring the Studio Format in an Upper-Division Optics Course: A First Look," Frances A. Mateycik and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 27-28, 2006, Emporia, KS.
63. "Using a Web-Based Classroom Interaction System to Enhance Student Learning," N. Sanjay Rebello and Joseph P. Beuckman, *Fall Meeting of the A-O-K Section of the AAPT*, October 27-28, 2006, Emporia, KS.
64. "Constructing Models of the Microscopic World: An Example from Friction," Edgar Corpuz and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 22-26, 2006, Syracuse, NY.
65. "What do Physics Faculty Expect from a Calculus Class," Lili Cui, N. Sanjay Rebello and Andrew G. Bennett, *American Association of Physics Teachers Summer Meeting*, July 22-26, 2006, Syracuse, NY.
66. "The Physics Portal: A One Stop Website for Physics," David Hestenes and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 22-26, 2006, Syracuse, NY.
67. "Research-Based Strategies in Upper-Division Undergraduate Physics Classes," N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 21-25, 2006, Anchorage, AK.
68. "Teacher-Researcher Professional Development: Case Study at KSU," N. Sanjay Rebello and Peter R. Fletcher, *Fall Meeting of the A-O-K Section of the AAPT*, October 7-8, 2005, Oklahoma City, OK.
69. "An Administrative and Methodological Framework for Teacher-Researcher Professional Development," Peter R. Fletcher and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 7-8, 2005, Oklahoma City, OK.
70. "Students' Modeling of Microscopic Friction: Dynamic Transfer Perspective," Edgar G. Corpuz and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 7-8, 2005, Oklahoma City, OK.
71. "Assessing College Students' Retention and Transfer from Calculus to Physics," Lili Cui, N. Sanjay Rebello and Andrew Bennett, *Fall Meeting of the A-O-K Section of the AAPT*, October 7-8, 2005, Oklahoma City, OK.

72. "Movie Physics: Transfer to the Real World," Carina M. Poltera, Peter R. Fletcher and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
73. "Dynamics of Students' Modeling of Microscopic Friction," Edgar G. Corpuz and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
74. "Students' Models of the Particulate Nature of Matter Across Cultures," Lili Cui, Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
75. "Constructing a Responsive Methodology: Grounded Theory, Phenomenology, and Action Research," Peter R. Fletcher and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
76. "Administrative and Methodological Professional Development: Case Study with Everyday Electrical Devices," N. Sanjay Rebello and Peter R. Fletcher, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
77. "A Model for Dynamic Transfer of Learning," Dean A. Zollman and N. Sanjay Rebello, *European Physics Education Conference*, 2005.
78. "A Wireless Pocket PC Based Classroom Response System," Dean A. Zollman and N. Sanjay Rebello, *European Physics Education Conference*, 2005.
79. "Presenting on Both Sides of the Atlantic -- Simultaneously," S. Raj Chaudhury, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 8-12, 2005, Albuquerque, NM.
80. "The Evolving Classroom Response System at KSU: ClassTalk, PRS, PDAs," Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 8-12, 2005, Albuquerque, NM.
81. "Challenges of Application-Based Curriculum Development," N. Sanjay Rebello and Peter R. Fletcher, *American Association of Physics Teachers Winter Meeting*, January 8-12, 2005, Albuquerque, NM.
82. "Retention and Transfer from Trigonometry to Algebra-based Physics," N. Sanjay Rebello, Darryl J. Ozimek and Paula V. Engelhardt, *Fall Meeting of the A-O-K Section of the AAPT*, October 8-9, 2004, Little Rock, AR.
83. "College Students' Mental Models of Atomic Friction and Lubrication," Edgar G. Corpuz and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 8-9, 2004, Little Rock, AR.
84. "Movie Physics: Transfer of Knowledge by Observation," Carina M. Poltera and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 8-9, 2004, Little Rock, AR.
85. "Investigating Students' Knowledge of the Particle Structure of Matter: A Preliminary Study in the U.S," Lili Cui, Dean A. Zollman and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 8-9, 2004, Little Rock, AR.
86. "Issues in Addressing and Representing Hybrid Mental Models," Zdeslav Hrepic, Dean A. Zollman, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
87. "Using Interview Data to Explore Transfer of Student Learning," Paula V. Engelhardt and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
88. "A Summary of the Effects of Question Order," Kara E. Gray and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
89. "Modeling Cycle and Research-Based Pedagogy in an Electronics Course," N. Sanjay Rebello and Kara E. Gray, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.

90. "Students' Microscopic Models of Friction: A First Look," Edgar G. Corpuz and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
91. "Retention and Transfer of Learning from Trigonometry to Algebra-Based Physics," Darryl J. Ozimek, Paula V. Engelhardt and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
92. "Light Bulbs and Complete Circuits: What One Says About the Other," Paula V. Engelhardt, Kara E. Gray and N. Sanjay Rebello, *APS April Meeting*, Denver, CO, May 1-4, 2004.
93. "A Perspective on Transfer of Learning," N. Sanjay Rebello, Alicia R. Allbaugh, Paula V. Engelhardt, Kara E. Gray, Zdeslav Hrepic, Salomon F. Itza-Ortiz and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 24-28, 2004, Miami Beach, FL.
94. "Learning About Teaching -- How Students Understand Sound in Musical Instruments," Paula V. Engelhardt, N. Sanjay Rebello and Edgar G. Corpuz, *American Association of Physics Teachers Winter Meeting*, January 24-28, 2004, Miami Beach, FL.
95. "A Real-time Assessment of Students' Mental Models of Sound Propagation," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 24-28, 2004, Miami Beach, FL.
96. "Students' and Experts' Understanding of the Content of a Lecture," Zdeslav Hrepic, N. Sanjay Rebello and Dean A. Zollman, *Fall Meeting of the A-O-K & Nebraska Sections of the AAPT*, Manhattan, KS.
97. "Retention and Transfer of Physics Knowledge to Engineering Courses," N. Sanjay Rebello, Paula V. Engelhardt and Salomon F. Itza-Ortiz, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
98. "Students' Views of How Sound is Produced by Musical Instruments," Paula V. Engelhardt and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
99. "Student Understanding and Perceptions of the Content of a Lecture," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
100. "Students' Energy Models: Mechanics Through Electromagnetism," Salomon F. Itza-Ortiz, Benjamin Lawrence, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
101. "Developing a Real-time Assessment of Students' Mental Models of Sound Propagation," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *International School of Physics "Enrico Fermi,"* July 15-25, 2003, Varenna, Italy.
102. "Mental Models of Energy — Mechanics Contexts," Salomon F. Itza-Ortiz, Benjamin Lawrence, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 11-15, 2003, Austin, TX.
103. "Students' Mental Models and Their Application to a Bicycle," N. Sanjay Rebello and Paula V. Engelhardt, *American Association of Physics Teachers Winter Meeting*, Austin, January 11-15, 2003, TX.
104. "The Effect of Question Order on Responses to Interview Questions," Kara E. Gray, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 11-15, 2003, Austin, TX.
105. "Problem Context and Newton's Second Law: A Further Look," Alicia R. Allbaugh, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 11-15, 2003, Austin, TX.
106. "Assessing Student Retention and Transfer of Physics Knowledge to Engineering Courses," N. Sanjay Rebello, Paula V. Engelhardt and Salomon F. Itza-Ortiz, *Fall Meeting of the A-O-K Section of the AAPT*, October 4-5, 2002, Ada, OK.

107. "Students' Mental Models and Their Applications in a Real-world Context – the Bicycle," Paula V. Engelhardt and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 4-5, 2002, Ada, OK.
108. "The Effect of Question Order on Students' Responses to Multiple Choice Questions," Kara E. Gray, N. Sanjay Rebello, and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October 4-5, 2002, Ada, OK.
109. "Problem Context and Newton's Second Law: A Further Look," Alicia Allbaugh, N. Sanjay Rebello and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October 4-5, 2002, Ada, OK.
110. "Students' Mental Models of Sound Propagation," Zdeslav Hrepic, Dean A. Zollman, and N. Sanjay Rebello *Fall Meeting of the A-O-K Section of the AAPT*, October 4-5, 2002, Ada, OK.
111. "The International Bicycle Project: Five Years of Student Exchanges and Curriculum Development," D. Davis, S. Chaudhury, A.J. Ellermeijer, E. Mioduszewska, M. Euler, R. Fuller, G. Kalkanis, H. Kuehnelt, V. Rahkonen, W. Wehrbein, D. Winch, N. Sanjay Rebello, and D. A. Zollman, *GIREP International Conference*, August 5-9, 2002, Lund, Sweden.
112. "Student Goals and Expectations in a Conceptual Physics Course," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
113. "The Effect of Question Order on Student Responses to Multiple-choice Questions," Kara Gray, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
114. "International Bicycle Project: Summary of Student Exchanges & Curriculum Development," D. Davis, S. Chaudhury, A.J. Ellermeijer, E. Mioduszewska, M. Euler, R. Fuller, G. Kalkanis, H. Kuehnelt, V. Rahkonen, W. Wehrbein, D. Winch, N. Sanjay Rebello, and D. A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
115. "Students' Mental Models and Their Applications of Newton's II Law in Electricity and Magnetism," Salomon F. Itza-Ortiz, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
116. "Problem Context and Newton's II Law: A First Look," Alicia Allbaugh, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
117. "Students' Mental Models of Sound Propagation," Zdeslav Hrepic, Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
118. "International Bicycle Project: Summary of Student Exchanges and Curriculum Development," Doyle Davis, S. Raj Chaudhury, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
119. "Using K-State Online and an In-class Personal Response System in a Large Enrollment Physical Science Class," N. Sanjay Rebello, *Convergence of Digital Learning Conference*, April 15-16, 2002, Manhattan, KS.
120. "Investigations of Students' Mental Models and Their Applications in Newton's II Law Problems," N. Sanjay Rebello and Salomon F. Itza Ortiz, *American Association of Physics Teachers Winter Meeting*, January 19-23, 2002, Philadelphia, PA.
121. "The Use of Physics Words in Everyday Language and Implications for Student Learning," Salomon Itza Ortiz, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 19-23, 2002, Philadelphia, PA.
122. "Investigations of Students' Mental Models and Their Applications in Newton's II Law," N. Sanjay Rebello, Salomon F. Itza-Ortiz and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October, 2001, Fayetteville, AR.
123. "Implications of the Use of Everyday Language on Learning Physics Concepts," Salomon F. Itza-Ortiz, N. Sanjay Rebello and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October, 2001, Fayetteville, AR.

124. "Adapting Research-Based Pedagogy in an Algebra-Trigonometry Physics Course," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 2001, Rochester, NY.
125. "Visual Quantum Mechanics: A Six-Year Review," Kristen Hogg, Chandima Cumuranatunge, Waldemar Axmann, Donna Pool, Lei Bao, Lawrence T. Escalada, Michael Thoresen, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 06-11, 2001, San Diego, CA.
126. "The Effect of Distracters on Student Performance on the Force Concept Inventory," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 06-11, 2001, San Diego, CA.
127. "Experiences with Workshop Physics at Clarion University," N. Sanjay Rebello and John W. Heard, *American Association of Physics Teachers Winter Meeting*, January 06-11, 2001, San Diego, CA.
128. "Investigating Students' Understanding of Quantum Mechanics Using Concept Maps," N. Sanjay Rebello, Kastro Hamed and Dean A. Zollman, Kansas State University, *American Association of Physics Teachers Winter Meeting*, Anaheim, CA, January 3-9, 1999.
129. "Hands-on Quantum Mechanics," N. Sanjay Rebello, Michael Thoresen, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 03-08, 1998, Lincoln, NE.
130. "Conceptual Understanding of Students After Using the Visual Quantum Mechanics Instructional Materials," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 03-08, 1998, Lincoln, NE.
131. "Visual Quantum Mechanics: A Field-Tester's Perspective," Todd Leif, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 03-08, 1998, Lincoln, NE.
132. "Replacing Distracters in the Force Concept Inventory (FCI) with more frequently given responses," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
133. "An Investigation of Students' Conceptions of Light," N. Sanjay Rebello, Kirsten Hogg, Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
134. "The New Look to Solids & Light and Luminescence: It's Cool Light!," Lawrence Escalada and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 2-7, 1998, New Orleans, LA.
135. "Teaching Potential Energy Diagrams with Inexpensive Equipment" Albena Dimitrov, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
136. "Hands-on Quantum Mechanics," Lawrence T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
137. "The Applicability of Visual Quantum Mechanics in High School Physics," Lawrence T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
138. "Feedback on an Instructional Unit on Waves and Wave Functions," N. Sanjay Rebello, Heidi Mauk Gruner, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
139. "The Effect of the Multiple-choice Format on Student Performance on the Force Concept Inventory," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
140. "Using ActiveX in Web-based Physics Instruction," N. Sanjay Rebello, Konstantin Sushenko, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.
141. "Student Understanding of the Atom," Ridvan Unal, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 11-16, 1997, Denver, CO.

142. "Luminescence: It's Cool Light - An Instructional Unit," R. Grabhorn, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 4-9, 1997, Phoenix, AZ.
143. "Is Tele-Transportation Possible? An Instructional Unit on Wave Functions," Heidi Gruner, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 4-9, 1997, Phoenix, AZ.
144. "Hands-on Quantum Physics," Heidi Gruner, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 4-9, 1997, Phoenix, AZ.
145. "Luminescence: It's Cool Light - An Instructional Unit," Lawrence. T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October 25-26, 1996, Edmond, OK.
146. "Luminescence: It's Cool Light - An Instructional Unit," Lawrence. T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *Fall Meeting of the A-O-K Section of the AAPT*, October 25-26, 1996, Edmond, OK.
147. "Solids & Light: An Instructional Unit on the Quantum Effects in LEDs," N. Sanjay Rebello, Lawrence T. Escalada, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 5-10, 1996, College Park, MD.
148. "Using Energy Bands to Understand Solid-state Devices," N. Sanjay Rebello, Lawrence T. Escalada, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 5-10, 1996, College Park, MD.
149. "Measurement of Magnetic Potential Energy Diagrams," A. Dimitrova, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 5-10, 1996, College Park, MD.
150. "Applications of Tunneling in Modern Technology," N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 5-10, 1996, College Park, MD.
151. "Learning Quantum Mechanics Through Interactive Computer Visualizations," N. Sanjay Rebello, Lawrence T. Escalada, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 13-18, 1996, Reno, NV.
152. "Learning Quantum Mechanics by Using LEDs and Solar Cells," Lawrence T. Escalada, N. Sanjay Rebello, and Dean A. Zollman, *American Association of Physics Teachers Winter Meeting*, January 13-18, 1996, Reno, NV.
153. "Visual Quantum Mechanics," N. Sanjay Rebello, Dean A. Zollman, and Lawrence T. Escalada, *Fall Meeting of the A-O-K Section of the AAPT*, October 27-28, 1995, Russellville, AR.

Contributed Posters

1. "Infusing Pedagogical Content Knowledge into Elementary Teacher Preparation," Claudia Fracchiolla and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minnesota, MN, July 26-30, 2014.
2. "Influence of Visual Cueing on Eye Movements Using Think-Aloud Protocol," Elise Agra, Xian Wu, John Hutson, Lester C. Loschky, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minnesota, MN, July 26-30, 2014.
3. "How Does Problem-solving Training Affect Students' Reasoning Patterns?," Xian Wu, Elise Agra, Claudia Fracchiolla, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Minnesota, MN, July 26-30, 2014.
4. "Eye Movements While Interpreting Graphical Representations of Motion," Jennifer L. Docktor, Jose Mestre, Elizabeth Gire and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.
5. "Assessing Transfer of Learning in Problem Solving from the Preparation for Future Learning Perspective Using a Computer Assessment," Dehui Hu and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.

6. "Effects of Argumentation Scaffolds on Student Performance on Conceptual Physics Problems," Carina M. Rebello and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.
7. "Assessing Pedagogical Content Knowledge of Future Elementary Teachers," N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.
8. "Can Visual Cues and Correctness Feedback Influence Students' Reasoning?," Amy Rouinfar, Elise Agra, Jeffrey Murray, Adam M. Larson, Lester C. Loschky and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.
9. "Student Epistemology About Mathematical Integration In A Physics Context: A Case Study," Joshua Von Korff, Andrew Elby, Dehui Hu and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, July 17-18, 2013.
10. "A Framework of Attentional Cueing in Physics Problem Solving," Amy Rouinfar, Adam Larson, Lester Loschky and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
11. "Eye Movements While Interpreting Graphical Representations of Motion," Jennifer L. Docktor, Jose Mestre, Elizabeth Gire, N. Sanjay Rebello and Adrian Madsen, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
12. "Context and Representation: Insights from Transfer Research on Teaching Physics," Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, July 13-17, 2013.
13. "Symbolic Forms for Infinitesimal and Finite Quantities in Introductory Physics," Joshua S. Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, New Orleans, LA, January 5-9, 2013.
14. "Assessing Students' Transfer of Learning Using Paper and Computer-Based Tests," Dehui Hu and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Philadelphia, PA, July 28-August 1, 2012.
15. "Categorizing Students' Use of Differential Resources in Physics Integrations Problems," Dehui Hu and N. Sanjay Rebello, *Transforming Research in Undergraduate STEM Education Conference*, St. Paul, MN, June 3-7, 2012.
16. "Inhibitors of Problem Solving Strategies for Representational Task Formats," Bashirah Ibrahim and N. Sanjay Rebello, *Transforming Research in Undergraduate STEM Education Conference*, St. Paul, MN, June 3-7, 2012.
17. "Comparison of Engineering Students' Kinds of Mental Representations across Contexts," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Ontario, CA, February 4-8, 2012.
18. "Students' Communication about Integral Calculus as a Tool for Instruction and Assessment, Joshua S. Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Ontario, CA, February 4-8, 2012.
19. "Comparing Students' Performance On Research-based Conceptual Assessments And Traditional Classroom Assessments," N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
20. "What Do Students Learn about Work in Physical and Virtual Experiments with Inclined Planes?," Jacquelyn J. Chini, Adrian Madsen, N. Sanjay Rebello, and Sadhana Puntambekar, *Physics Education Research Conference*, Omaha, NE, 2011.
21. "Scaffolding Students' Application of the 'Area Under a Curve' Concept in Physics Problems," Dehui Hu, Joshua Von Korff, and N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
22. "Using Johnson-Laird's Cognitive Framework of Sense-making to Characterize Engineering Students' Mental Representations in Kinematics," Bashirah Ibrahim and N. Sanjay Rebello, *AIP Physics Education Research Conference*, Omaha, NE, 2011.

23. "Assessing Students' Ability to Solve Introductory Physics Problems Using Integrals in Symbolic and Graphical Representations," Neelam Khan, Dehui Hu, Dong-Hai Nguyen, and N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
24. "Adapting a Theoretical Framework for Characterizing Students' Use of Equations in Physics Problem Solving," Carina M. Rebello and N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
25. "How Accurately can Students Estimate their Performance on an Exam and how does this Relate to their Actual Performance on the Exam?" N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
26. "Comparing the Development of Students' Conceptions of Pulleys Using Physical and Virtual Manipulatives," Amy Rouinfar, Adrian Madsen, T.D. N. Hoang, Sadhana Puntambekar and N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
27. "Assessment of Vertical Transfer in Problem Solving: Mapping the Problem Design Space," Joshua Von Korff, Dehui Hu, and N. Sanjay Rebello, *Physics Education Research Conference*, Omaha, NE, 2011.
28. "E-Games and Graph Problems: Helping Students Play the Game Physics Education Research," Elizabeth Gire, Dong-Hai Nguyen and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
29. "Influence of Prior Preparation on Students' Use of Online Hints," Dehui Hu, Joshua Von Korff and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
30. "Johnson-Laird Cognitive Framework: Its Application During Problem Solving," Bashirah Ibrahim and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
31. "Case Study of Student Pairs Working on Electronics Capstone Projects," Nasser Juma, N. Sanjay Rebello, Kristan Corwin and Brian Washburn, *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
32. "TAs Judgments about Student Problem-Solving Difficulties," *American Association of Physics Teachers Summer Meeting*, Omaha, NE, July 30-August 3, 2011.
33. "Students' Difficulties with Integration in Introductory Electricity and Magnetism," Dong-Hai Nguyen, N. Sanjay Rebello and Elizabeth Gire, *American Association of Physics Teachers Winter Meeting*, Jacksonville, FL, 2011.
34. "Facilitating Strategies for Solving Work-Energy Problems in Graphical and Equational Representations," Dong-Hai Nguyen, Elizabeth Gire and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, 2010.
35. "Investigating the Perceived Difficulty of Introductory Physics Problems, Elizabeth Gire and N. Sanjay Rebello, *Physics Education Research Conference*, Portland, OR, 2010.
36. "Longitudinal Development of Students' Representational Skills in Introductory Physics," Dong-Hai Nguyen, Elizabeth Gire and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
37. "When Would Students Use Physical or Virtual Data?" Jacquelyn J. Chini, Adrian Carmichael, Elizabeth Gire, N. Sanjay Rebello and Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
38. "Effects of Temporal Order of Physical and Virtual Activities," Adrian Carmichael, Jacquelyn J. Chini, Elizabeth Gire, N. Sanjay Rebello and Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
39. "Thinking About Representational Fluency in Terms of Epistemic Games," Dong-Hai Nguyen, Elizabeth Gire and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.

40. "Capstone Projects for Physics Majors: An Electronics and Instrumentation Course," Nasser Juma, Elizabeth Gire, Kristan Corwin, Brian Washburn and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Portland, OR, 2010.
41. "Students' Views of Physical and Virtual Experiments with Pulleys," Jacquelyn J. Chini, Elizabeth Gire, Adrian Carmichael, N. Sanjay Rebello and Sadhana Puntambekar, *AAPT/APS Joint Winter Meeting*, Washington, DC, 2010.
42. "Investigating Students' Conceptual Understanding and Transfer in Mathematics," Andrew G. Bennett, Todd Moore, Xuan Hien Nguyen, N. Sanjay Rebello, Dean Zollman and Steve Warren, *REESE PI Meeting*, Washington DC, 2010.
43. "Investigating Students' Transfer of Problem Solving Skills in Physics Across Multiple Representations," N. Sanjay Rebello, Elizabeth Gire, Dong-Hai Nguyen, Dean A. Zollman, Andrew G. Bennett and Steve Warren, *REESE PI Meeting*, Washington DC, 2010.
44. "Students' Rating of Problem Similarity as a Measure of Problem Solving Expertise," Frances A. Mateycik, N. Sanjay Rebello and David Jonassen, *2010 National Association for Research in Science Teaching Annual International Conference*, Philadelphia, PA, 2010.
45. "Facilitating Students' Problem Solving Across Representations in Introductory Physics," Dong-Hai Nguyen & N. Sanjay Rebello, *2010 National Association for Research in Science Teaching Annual International Conference*, Philadelphia, PA, 2010.
46. "Investigating Change & Consistency in Introductory College Students' Understanding About Pulleys," Amy Rouinfar, Jacquelyn J. Chini, Adrian Carmichael, Sadhana Puntambekar and N. Sanjay Rebello, *2010 National Association for Research in Science Teaching Annual International Conference*, Philadelphia, PA, 2010.
47. "Qualitative Analysis of the Effects of Sequence of Physical and Virtual Activities on Student Conceptual Understanding in Mechanics," Adrian Carmichael, Jacquelyn J. Chini, N. Sanjay Rebello and Sadhana Puntambekar, *2010 National Association for Research in Science Teaching Annual International Conference*, Philadelphia, PA, 2010.
48. "Comparing Students' Performance and Reasoning with Physical and Virtual Manipulatives to Learn about Pulleys," Jacquelyn J. Chini, Amy Rouinfar, Adrian Carmichael, N. Sanjay Rebello and Sadhana Puntambekar, *2010 National Association for Research in Science Teaching Annual International Conference*, Philadelphia, PA, 2010.
49. "Facilitating Students' Transfer of Problem Solving in Introductory Mechanics," Dong-Hai Nguyen & N. Sanjay Rebello, *Arkansas-Oklahoma-Kansas Section Meeting of the American Association of Physics Teachers Fall Meeting*, Manhattan, KS, 2009.
50. "Can We Assess Efficiency and Innovation in Transfer?," N. Sanjay Rebello, *Physics Education Research Conference*, Ann Arbor, MI, 2009.
51. "Facilitating Students' Transfer of Problem Solving Skills Across Representations in Teaching/Learning Interviews," Dong-Hai Nguyen and N. Sanjay Rebello, *Physics Education Research Conference*, Ann Arbor, MI, 2009.
52. "Students' Performance on Problem Solving Tasks in Teaching/Learning Interviews," Dong-Hai Nguyen and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, Ann Arbor, MI, 2009.
53. "Measuring the Speed of Light in an Optical Fiber – Integrating Experimentation and Instrumentation," Nasser Juma, A.D. Edwards, P. Chang, N. Sanjay Rebello, Kristan Corwin, Brian Washburn, *Gordon Conference on Advanced Physics Laboratories*, July 24-26, 2009, Ann Arbor, MI.
54. "Social and Technological Challenges in Creating a Web-Based Tutoring System," Chris M. Nakamura, Sytil K. Murphy, Nasser M. Juma, N. Sanjay Rebello and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
55. "How Does Classroom or Interview Room Environment Affect Research Data?" Adrian Carmichael, Jacquelyn J. Chini, N. Sanjay Rebello, Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.

56. "Can Simulations Replace Hands-on Experiments in Mechanics Too?" Jacquelyn J. Chini, Adrian Carmichael, N. Sanjay Rebello, Sadhana Puntambekar, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
57. "Students' Performance on Text Editing, Jeopardy and Problem Posing Tasks," Frances A. Mateycik, N. Sanjay Rebello, David H. Jonassen, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
58. "Students' Performance on Problem Solving Tasks in Teaching/Learning Interviews," Dong-Hai Nguyen, N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
59. "Integrating Experimentation and Instrumentation in Upper-Division Physics," N. Sanjay Rebello, Qi Zhang, Kristan Corwin, and Brian Washburn, *American Association of Physics Teachers Summer Meeting*, July 26-29, 2009, Ann Arbor, MI.
60. "Facilitating Student Transfer of Problem Solving in Introductory Mechanics," Dong-Hai Nguyen and N. Sanjay Rebello, *Fall Meeting of the A-O-K Section of the AAPT*, October 9-10, 2009, Manhattan, KS.
61. "Student Performance Using Case-Reuse Strategies In Group Learning Interviews," N. Sanjay Rebello, Frances A. Mateycik, David Jonassen, *American Association of Physics Teachers Winter Meeting*, February 14-19, 2009, Chicago, IL.
62. "Assessing Case Reuse Strategies Using Contrasting Cases and Text Editing," Frances A. Mateycik, David Jonassen, N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, February 14-19, 2009, Chicago, IL.
63. "Studio Optics: Upper-division Implementation of Studio Format -- A First Look," Dyan McBride, Frances A. Mateycik, N. Sanjay Rebello and Christopher M. Sorensen, *American Association of Physics Teachers Summer Meeting*, July 27 –31, 2007, Greensboro, NC.
64. "Preliminary Implementation of Case-Reuse in Algebra-based Physics," Frances A. Mateycik, N. Sanjay Rebello, Zdeslav Hrepic and David H. Jonassen, *American Association of Physics Teachers Summer Meeting*, July 27 –31, 2007, Greensboro, NC.
65. "Using a Web-based Classroom Interaction System to Enhance Student Learning," Joseph P. Beuckman and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, January 6 –11, 2007, Seattle, WA.
66. "Research and Instructional Strategies for Student Modeling of Microscopic Friction," Edgar Corpuz and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 22-26, 2006, Syracuse, NY.
67. "Using Physics Jeopardy Problems to Assess Students' Learning," Lili Cui, N. Sanjay Rebello and Andrew G. Bennett, *American Association of Physics Teachers Summer Meeting*, July 22-26, 2006, Syracuse, NY.
68. "Transfer of Learning from College Calculus to Physics Courses," Lili Cui, N. Sanjay Rebello, Peter R. Fletcher, and Andrew G. Bennett, *2006 National Association for Research in Science Teaching Annual International Conference*, April 3-6, 2006, San Francisco, CA.
69. "A Framework for Integrated Professional Development," Peter R. Fletcher and N. Sanjay Rebello, *2006 National Association for Research in Science Teaching Annual International Conference*, April 3-6, 2006, San Francisco, CA.
70. "College Students' Ideas about Some Everyday Electrical Devices," Jacquelyn J. Haynicz, Peter R. Fletcher, and N. Sanjay Rebello, *2006 National Association for Research in Science Teaching Annual International Conference*, April 3-6, 2006, San Francisco, CA.
71. "Dynamic Transfer and Learning Using a Constructivist-Based Curriculum," Charles B. Mamolo, Peter R. Fletcher, and N. Sanjay Rebello, *2006 National Association for Research in Science Teaching Annual International Conference*, April 3-6, 2006, San Francisco, CA.
72. "Students Epistemic Modes While Making Sense of Action Movie Clips," Carina M. Poltera, Peter R. Fletcher, and N. Sanjay Rebello, *2006 National Association for Research in Science Teaching Annual International Conference*, April 3-6, 2006, San Francisco, CA.

73. "CoMPASS: Integrating Digital Text in Design-Based Science Classrooms: Scaling-Up," N. Sanjay Rebello, Sadhana Puntambekar, Ann A. O'Connell and Roland Hübscher, *American Association of Physics Teachers Winter Meeting*, January 21-25, 2006, Anchorage, AK.
74. "Assessing Student Transfer from Calculus to Physics," Lili Cui, N. Sanjay Rebello and Andrew Bennett, *American Association of Physics Teachers Summer Meeting*, August 6-10, 2005, Salt Lake City, UT.
75. "A Model for Dynamic Transfer of Learning," N. Sanjay Rebello and Dean A. Zollman, *European Physics Education Conference*, 2005.
76. "Research of students' mental models learning and transfer as a guide to application-based curriculum development and instruction in physics," N. Sanjay Rebello, Peter R. Fletcher, Edgar G. Corpuz, *NSF's REC PI Meeting*, October 18-19, 2004, Arlington, VA.
77. "Investigating Students' Knowledge of Particle Structure of Matter in Different Cultures," Lili Cui, Dean A. Zollman, and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, July 31- August 4, 2004, Sacramento, CA.
78. "Research of Students' Mental Models Learning and Transfer as a Guide to Application-based Curriculum Development and Instruction in Physics," N. Sanjay Rebello, Paula V. Engelhardt, Kara E. Gray and Edgar G. Corpuz, *NSF's REC PI Meeting*, October 27-28, 2003, Arlington, VA
79. "Student Goals and Expectations in a Large-enrollment Physical Science Class," N. Sanjay Rebello, *Physics Education Research Conference*, August 6-7, 2003, Madison, WI.
80. "The Teaching Experiment - What it is and What it isn't," Paula V. Engelhardt, N. Sanjay Rebello, Edgar G. Corpuz and Darryl J. Ozimek, *Physics Education Research Conference*, August 6-7, 2003, Madison, WI.
81. "Student Understanding and Perceptions of the Content of a Lecture," Zdeslav Hrepic, Dean A. Zollman, and N. Sanjay Rebello, *Physics Education Research Conference*, August 6-7, 2003, Madison, WI.
82. "Modeling Cycle Pedagogy in an Electronics Course: First impressions," N. Sanjay Rebello and Kara E. Gray, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
83. "Investigating Students' Understanding of Light Bulbs and Complete Circuits," Kara E. Gray, Paula V. Engelhardt and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 2-6, 2003, Madison, WI.
84. "Ordering Effects in Multiple Choice Exams and Interviews," Paula V. Engelhardt and N. Sanjay Rebello, *American Association of Physics Teachers Winter Meeting*, Austin, January 11-15, 2003, TX.
85. "Using Technology in a Large Enrollment Physical Science Class," N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
86. "Students' Mental Models of Light Energy and Color," Seunghee Lee, Dean A. Zollman and N. Sanjay Rebello, *American Association of Physics Teachers Summer Meeting*, August 3-7, 2002, Boise, ID.
87. "Learning Physics in the Context of a Bicycle," N. Sanjay Rebello, Robert G. Fuller, Ewa Mioduszewska and William M. Wehrbein, *American Association of Physics Teachers Winter Meeting*, January 19-23, 2002, Philadelphia, PA.
88. "Multimedia Studio Physics-Mathematics Lab," N. Sanjay Rebello and John W. Heard, *Western Pennsylvania AAPT Section Fall Meeting*, October 21, 2000.
89. "A Ray Tracing Program for the High School Classroom," Jamie McGrath, John Watkins, and N. Sanjay Rebello, *Western Pennsylvania AAPT Section Spring Meeting*, April 08, 2000.
90. "Visual Quantum Mechanics," *Western Pennsylvania AAPT Section Fall Meeting*, October 03, 1998, Washington, PA.
91. "Students' Understanding of Quantum Phenomena," N. Sanjay Rebello and Dean A. Zollman, *Physics Education Research Conference*, August 01-02, 1998, Lincoln, NE.

92. "Students' Conceptions of the Relationship Between Color and Energy of Light," N. Sanjay Rebello, Kirsten Hogg and Dean A. Zollman, *American Association of Physics Teachers Summer Meeting*, August 03-08, 1998, Lincoln, NE.

Ph.D. Dissertation & M.S. Thesis/Report Supervision

1. "*Influence of visual cueing and outcome feedback on physics problem solving and visual attention*," Ph.D. Dissertation, Physics, Amy Rouinfar, defense scheduled October 2014.
2. "*Understanding Introductory Students' Use of Differentials and Integrals in Physics from Multiple Perspectives*," Ph.D. Dissertation, Physics, Dehui Hu, defended July 2013.
3. "*Studies of Visual Attention in Physics Problem Solving*," Ph.D. Dissertation, Physics, Adrian Madsen nee' Carmichael, defended January 2013.
4. "*Facilitating Students' Application of the Integral and the Area under the Curve Concepts in Physics Problems*," Ph.D. Dissertation, Physics, Dong-Hai Nguyen, defended May 2011.
5. "*Comparing the Scaffolding Provided by Physical and Virtual Manipulatives for Students' Understanding of Simple Machines*," Ph.D. Dissertation, Physics, Jacquelyn J. Chini nee' Haynicz, defended August 2010.
6. "Integrating *Experimentation and Instrumentation in Upper-Division Physics,"* M.S. Report, Physics, Qi Zhang, defended August 2009.
7. "*Facilitating Case Reuse during Problem Solving in Algebra-based Physics*," Ph.D. Dissertation, Physics, Frances A. Mateycik, defended July 2009.
8. "*A Case Study of the Physics Enhancement Project for Two Year Colleges, Its Effects and Outcomes On the Teaching of Undergraduate Physics At Two Year Colleges*," Ph.D. Dissertation, Curriculum & Instruction, Todd R. Leif, defended September 2008.
9. "*Assessing Students' Retention and Transfer from Calculus to Physics*," Ph. D. Dissertation, Physics, Lili Cui, defended July 2006.
10. "*Students' Modeling of Friction at the Microscopic Level,*" Ph.D. Dissertation, Physics, Edgar G. Corpuz, defended July 2006.
11. "*Student Learning, Retention, and Transfer from Trigonometry to Physics*," M.S. Thesis, Physics, Darryl J. Ozimek, defended July 2004.
12. "*The Effect of Question Order on Student Responses to Multiple Choice Physics Questions*," M.S. Thesis, Physics, Kara E. Gray, defended May 2004.

PROFESSIONAL SERVICE

Departmental

Kansas State University

Advisory Committee to the Department Head	2006 – 2008, 2011 – 2013, 2014 -- 2016
Undergraduate Affairs, Scholarships and Recruitment Committee	2006 – 2008
Physics Departmental Ph.D. Qualifying Exam Committee	2011 – 2013
Undergraduate Advisor	2009 – present
Undergraduate Advisor for Future School Teachers	2006 – present
Laboratory & Demonstrations Committee Chair	2006 – 2007, 2010 – 2012
Physics Liaison for the Math-Physics Computer Classroom	2001 – 2008
Physics Education Research Faculty Search Committee	2010 – 2011
AMO Faculty Search Committee	2001 – 2002
Physics booth in KSU Undergraduate Majors Fair	2001 – 2003, 2005 – 2010
Physics Department Telefund	2002
Undergraduate Physics Club Advisor	2006
Computer Advisory Committee	2002 – 2005

Graduate Student Affairs Committee	2002 – 2005
General Physics Review Committee Chair	2010 – 2011
QuarkNet Teacher Summer Training Workshops	2003, 2004, 2008
New Physics Building Committee	2004

Colloquium speakers hosted:

John Belcher (Massachusetts Institute of Technology)	Fall 2013
Geoff Potvin (Clemson University)	Spring 2013
Paul Adams & Jack Maseberg (Fort Hays State University)	Fall 2012
Elizabeth Gire (Kansas State University)	Spring 2010
Bruce Patton (Ohio State University)	Spring 2009
Steven Pollock (University of Colorado, Boulder)	Fall 2008
John R. Thompson (University of Maine)	Spring 2007
Doris J. Wagner (Rensselaer Polytechnic Inst./Grove City College)	Fall 2006
Kenneth Heller (University of Minnesota)	Spring 2006
Noah Finkelstein (University of Colorado, Boulder)	Fall 2005
Ruth Chabay & Bruce Sherwood (North Carolina State University)	Fall 2004
David Pritchard (Massachusetts Institute of Technology)	Spring 2004
Corinne Manogue (Oregon State University)	Fall 2003
Jose P. Mestre (University of Massachusetts, Amherst)	Spring 2003
Fred Goldberg (San Diego State University)	Spring 2002

Clarion University

Physics Department Faculty Search Committee	1999 – 2001

University-wide

Kansas State University

General Education Task Force Assessment Subcommittee	2007
Faculty focus group to develop online survey system	2001 – present
Strategic Ways to Acquire Technology (SWAT) Team	2003 – 2005

Clarion University

Presidential Commission on the Status of Women	2000 – 2001
Presidential Commission on Sexual Harassment	1999 – 2001

Regional

Vice President & Treasurer of the A-O-K (Arkansas-Oklahoma-Kansas) Section of AAPT	2002 – 2003, 2008 – 2009
President of the A-O-K Section of AAPT	2004 – 2005
Organized the A-O-K Fall Section Meeting jointly with the Nebraska Section of the AAPT, and the Big-12 Physics Education Research (PER) Conference, Manhattan, KS	2003
Secretary of the A-O-K Section of AAPT	2001 – 2002

National

Physics Education Research Election Organizing Committee	2004 – 2006
Educational Technologies Committee of the AAPT	2004 – 2007
Organizer *Physics Education Research Conference*, Salt Lake City, UT	2005
Editor, *Physics Education Research Conference Proceedings*	2010 – 2012
Proposal reviewer for the National Science Foundation	2003 –
Associate Editor, *Physical Review Special Topics – Phys. Educ. Research*	2008 – 2014
Physics Education Research Leadership Organizing Committee	2010 – 2011
AAPT Graduate Education Committee	2010 – 2013

PROFESSIONAL MEMBERSHIPS

International

International Society for the Learning Sciences (ISLS)	2010 –

National

American Physical Society (APS)	2004 –
American Educational Research Association (AERA)	2006 –
National Association for Research in Science Teaching (NARST)	1996 –
National Science Teachers Association (NSTA)	1996 –
American Association of Physics Teachers (AAPT)	1995 –
Sigma Xi Scientific Honor Society	1995 –

Regional

Kansas Association of Teachers of Science (KATS)	2003 –
Arkansas-Oklahoma-Kansas (A-O-K) Section of AAPT	1995 – 1998, 2001 –
Western Pennsylvania Section of AAPT	1998 – 2001

COLLABORATORS & OTHER AFFILIATIONS

Collaborators (with joint projects and/or grants - listed in alphabetical order)

Andrew G. Bennett (Professor & Head, Department of Mathematics, Kansas State University)
Kristan L. Corwin (Associate Professor, Department of Physics, Kansas State University)
Jennifer Docktor (Assistant Professor, Department of Physics, University of Wisconsin – La Crosse)
Elizabeth Gire (Assistant Professor, Department of Physics, University of Memphis)
Roland Hubscher (Associate Professor, Department of Information Design & Corporate Communication, Bentley College, MA)
David H. Jonassen (Distinguished Professor, Department of Educational Psychology & Learning Technology, University of Missouri, Columbia)
Neelam Khan (Assistant Professor, School of Science & Technology, Georgia Gwinnett College)
Lester C. Loschky (Associate Professor, Department of Psychological Sciences, Kansas State University)
Jose P. Mestre (Professor, Physics & Educational Psychology, University of Illinois)
Sadhana Puntambekar (Professor, Department of Educational Psychology, University of Wisconsin, Madison)
Talat S. Rahman (Pegasus Professor & Chair, Department of Physics, University of Central Florida)
Eleanor Sayre (Assistant Professor, Department of Physics, Kansas State University)
Christopher Sorensen (University Distinguished Professor & Teaching Scholar, Department of Physics, Kansas State University)
Jacqueline D. Spears (Professor, Department of Curriculum & Instruction, Kansas State University)
Kimberly Staples (Associate Professor, Department of Curriculum & Instruction, Kansas State University)
Steve Warren (Associate Professor, Department of Electrical & Computer Engineering, Kansas State University)
Brian Washburn (Associate Professor, Department of Physics, Kansas State University)
Dean A. Zollman (University Distinguished Professor & Teaching Scholar, Department of Physics, Kansas State University)

Graduate Advisors

Fred S. Shoucair (1992 – 1995)
Hendrik J. Gerritsen (1992 – 1995)
Gang Xiao (1990 – 1992)

Postdoctoral Advisor

Dean A. Zollman (1995 – 1998)

Postgraduate Researchers Advised

Bashirah Ibrahim (2010 – 2012), Currently Research Associate, Department of Physics, Ohio State University, Columbus, OH

Joshua Von Korff (2010 – 2012), Currently Assistant Professor of Physics, Georgia State University, Atlanta, GA

Elizabeth Gire (2009–2010), Currently Assistant Professor of Physics, University of Memphis, Memphis, TN

Peter R. Fletcher (2004 – 2006), Currently Lecturer, University of New England, Armidale, Australia

Paula V. Engelhardt (2002 – 2004), Currently Associate Professor of Physics, Tennessee Technological University, Cookeville, TN

Graduate Researchers Advised

Doctoral Students:

Xian Wu (Ph.D., Physics, 2013 – 2015 expected)

Claudia Fracchiolla (Ph.D., Curriculum & Instruction, 2013 – 2015 expected)

Elise Agra (Ph.D., Physics, 2013 – 2015 expected)

Jessica Dwyer (Ph.D., Curriculum & Instruction, 2012 – 2015 expected)

Amy Rouinfar (Ph.D., Physics, 2010 – 2014) Currently Research Assistant, PhET Simulation Group, University of Colorado, Boulder, CO

Dehui Hu (Ph.D., Physics, 2009 – 2013), Currently Lecturer, Rochester Institute of Technology

Adrian Madsen nee' *Carmichael* (Ph.D., Physics, 2008 – 2012), Last employed -- Post-doctoral Research Associate, American Association of Physics Teachers

Dong-Hai Nguyen (Ph.D., Physics, 2007 – 2011), Currently Assistant Professor of Physics, Ho Chi Minh University of Pedagogy

Jacquelyn J. Chini nee' *Haynicz* (Ph.D., Physics, 2006 – 2010), Currently Visiting Assistant Professor of Physics, University of Central Florida

Frances A. Mateycik (Ph.D., Physics, 2005 – 2009), Currently Assistant Professor of Physics, Pennsylvania State University, Altoona

Todd R. Leif (Ph.D., Curriculum & Instruction, 2006 – 2008), Currently Science Department Head, Cloud County Community College, Concordia, KS.

Lili Cui (Ph.D., Physics, 2003 – 2006), Currently Lecturer, Department of Physics, University of Maryland – Baltimore County

Edgar D. Corpuz (Ph.D., Physics, 2002 – 2006), Currently Associate Professor of Physics, University of Texas – Pan American

Masters Students:

Nandana Weliweriya – Liyanage (M.S., Physics, 2013 – 2015 expected)

Qi Zhang (M.S., Physics, 2007 – 2009), Currently Ph.D. Student, Physics Department, University of Central Florida

Charles B. Mamolo (M.S., Physics, 2003 – 2005), Currently Physics Teacher & Science Department Co-Chair, Manhattan High School, Manhattan, KS

Darryl J. Ozimek (M.S., Physics, 2002 – 2004), Currently Instructor, Physics Department, Duquesne University, Pittsburgh, PA

Kara E. Gray (M.S., Physics, 2003 – 2004) Currently Assistant Professor, Seattle Pacific University

Undergraduate Researchers Advised

Drew Johnson (Kansas State University, 2014 –)
Mitchell Burkett (Kansas State University, 2014 –)
Jeffrey Murray (Kansas State University, McNair Scholar, 2012 –)
Nicholas Oderio (Adrian College, REU [Research Experiences for Undergraduates], Summer 2013)
Elizabeth Olson (Union University, REU Summer 2012)
Tanner Stevens (University of Minnesota, REU Summer 2010)
Amy Rouinfar (Florida State University, REU Summer 2009)
Mindy Gratny nee' *Kohler* (Kansas State University, 2005 – 2006)
Carina M. Poltera (Kansas State University, 2004 – 2005)
Jacquelyn J. Haynicz (Drew University, Summer 2005)
Jasmin Shrestha (Smith College, Summer 2004)
Kara E. Gray (Kansas State University, 2001 – 2003)